



# STIC Search Report

## Biotech-Chem Library

STIC Database Tracking Number: 178165

TO: Bao-Qun Li  
Location: REM-3D24&3C18  
Art Unit: 1648  
Thursday, February 09, 2006  
Case Serial Number: 10/817591

From: Toby Port  
Location: Biotech-Chem Library  
REM-1A59  
Phone: 571-272-2523  
  
toby.port@uspto.gov

### Search Notes

Examiner Li,

See attached results.

If you have any questions about this search feel free to contact me at any time.

Thank you for using STIC search services!

Toby Port  
X22523

6680059

16,719,619

6960569

6858590 09/929, 958

09/705,547

09/466,035

08/931,031



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# STIC SEARCH RESULTS FEEDBACK FORM

## Biotech-Chem Library

Questions about the scope or the results of the search? Contact *the searcher or contact:*

Mary Hale, Information Branch Supervisor  
Remsen Bldg. 01 D86  
571-272-2507

## Voluntary Results Feedback Form

➤ I am an examiner in Workgroup:  Example: 1610

➤ Relevant prior art **found**, search results used as follows:

- ☐ 102 rejection
- ☐ 103 rejection
- ☐ Cited as being of interest.
- ☐ Helped examiner better understand the invention.
- ☐ Helped examiner better understand the state of the art in their technology.

Types of relevant prior art found:

- ☐ Foreign Patent(s)
- ☐ Non-Patent Literature  
(journal articles, conference proceedings, new product announcements etc.)

➤ Relevant prior art **not found**:

- ☐ Results verified the lack of relevant prior art (helped determine patentability).
- ☐ Results were not useful in determining patentability or understanding the invention.

Comments:

Drop off or send completed forms to STIC-Biotech-Chem Library, Remsen Bldg.







STIC-Biotech/ChemLib

178168

From: Li, Bao-Qun  
Sent: Tuesday, January 31, 2006 12:59 PM  
To: STIC-Biotech/ChemLib  
Subject: 10,817,591

Please do the sequence homology and interference search for SEQ ID NO: 16 and its complement.

Bao Qun Li M.D  
TC 1600  
Art Unit 1648  
Tel. 517-272-0904  
REM, 3C18  
Rm. 3D24

CKFE

\*\*\*\*\*  
Searcher: \_\_\_\_\_  
Searcher Phone: \_\_\_\_\_  
Date Searcher Picked up: \_\_\_\_\_  
Date completed: \_\_\_\_\_  
Searcher Prep Time: \_\_\_\_\_  
Online Time: \_\_\_\_\_

\*\*\*\*\*  
Type of Search  
NA# \_\_\_\_\_ AA# \_\_\_\_\_  
S/L: \_\_\_\_\_ Oligomer: \_\_\_\_\_  
Encode/Transl: \_\_\_\_\_  
Structure #: \_\_\_\_\_ Text: \_\_\_\_\_  
Inventor: \_\_\_\_\_ Litigation: \_\_\_\_\_

\*\*\*\*\*  
Vendors and cost where applicable  
STN: \_\_\_\_\_  
DIALOG: \_\_\_\_\_  
QUESTEL/ORBIS: \_\_\_\_\_  
LEXIS/NEXIS: \_\_\_\_\_  
SEQUENCE SYSTEM: \_\_\_\_\_  
WWW/Internet: \_\_\_\_\_  
Other (Specify): \_\_\_\_\_

The "C" is (spelled)

GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OW nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:09:58 ; Search time 10535 Seconds  
(without alignments)  
11120.489 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061  
Sequence: 1 atgsgcctatcacgsgccta.....atgaatggaagatgctga 2061

Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 5883141 seqs, 28421725653 residues

Total number of hits satisfying chosen parameters: 11766282

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

GenEmb1:\*  
1: gb\_ba:\*  
2: gb\_in:\*  
3: gb\_env:\*  
4: gb\_om:\*  
5: gb\_ov:\*  
6: gb\_pac:\*  
7: gb\_ph:\*  
8: gb\_pr:\*  
9: gb\_ro:\*  
10: gb\_scs:\*  
11: gb\_sy:\*  
12: gb\_un:\*  
13: gb\_vl:\*  
14: gb\_hg:\*  
15: gb\_pl:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	2061	100.0	2061	6	CQ826998
2	2061	100.0	2061	6	AR640522
3	2061	100.0	2061	6	AX441176
4	2061	100.0	2061	6	AX467113
5	1854.8	89.6	9610	13	HEC278830
6	1846.4	89.6	8791	13	AY615798
7	1787	86.7	6299	6	AX164584
8	1786	86.7	5360	6	I06434
9	1786	86.7	5360	6	I09328
10	1786	86.7	6785	6	I06440
11	1786	86.7	7310	6	AR118696
12	1786	86.7	7310	6	I09331
13	1786	86.7	7310	13	HPCPOLYP
14	1786	86.7	9185	6	BD091382
15	1786	86.7	9185	6	I08294
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17	1786	86.7	9379	6	AR301300
18	1786	86.7	9401	6	AR176483

19	1786	86.7	9401	6	BD080334	BD080334 Hepatitis
20	1786	86.7	9401	6	E65593	E65593 Hepatitis C
21	1786	86.7	9401	6	I71894	I71894 Sequence 9
22	1786	86.7	9401	6	I81885	I81885 Sequence 9
23	1786	86.7	9401	13	HPCPOLYP	HPCPOLYP
24	1784.4	86.6	6785	6	AR118692	AR118692 Sequence 10
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28	1784.4	86.6	9185	6	AR118722	AR118722 Sequence
29	1784.4	86.6	9185	6	AR118723	AR118723 Sequence
30	1784.4	86.6	9379	6	AR118747	AR118747 Sequence
31	1782.8	86.5	8484	13	AY695436	AY695436 Hepatitis
32	1781.2	86.4	2058	6	AR404933	AR404933 Sequence
33	1781.2	86.4	2058	6	AX395309	AX395309 Sequence
34	1781.2	86.4	5360	6	AR118686	AR118686 Sequence
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37	1781.2	86.4	9618	13	AF271632	AF271632 Hepatitis
38	1781.2	86.4	9646	11	AF387806	AF387806 Synthetic
39	1781.2	86.4	9693	11	AF387807	AF387807 Synthetic
40	1779.6	86.3	2058	6	AR408362	AR408362 Sequence
41	1779.6	86.3	2058	6	AR584936	AR584936 Sequence
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43	1779.6	86.3	8475	13	AY695437	AY695437 Hepatitis
44	1774.8	86.1	12980	6	AR110831	AR110831 Sequence
45	1774.8	86.1	12980	6	BD069985	BD069985 Functiona

#### ALIGNMENTS

RESULT 1  
LOCUS CQ826998 2061 bp DNA linear PAT 29-JUN-2004  
DEFINITION Sequence 1 from Patent WO2004048402.  
ACCESSION CQ826998  
VERSION CQ826998.1 GI:49455655

#### KEYWORDS

SOURCE  
ORGANISM  
synthetic construct  
synthetic construct  
other sequences; artificial sequences.

REFERENCE  
1  
AUTHORS  
TITLE  
A hepatitis C virus codon optimized non-structural ns3/4a fusion  
gene  
JOURNAL  
Patent: WO 2004048402-A 1 10-JUN-2004;  
TRIPEP AB (SE)

#### FEATURES

source  
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Location/Qualifiers  
/organism="synthetic construct"  
/mol\_type="unassigned DNA"  
/db\_xref="taxon:32630"  
/note="Hepatitis C virus NS3/4A coding region"

#### ORIGIN

Query Match 100.0%; Score 2061; DB 6; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
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DB 1 ATGGGCGCTATCACGGCTTATGCCAGACGACCAAGAGGCGCTTTGGATGATATACCC 60  
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DB 61 AGCTTGACCGGCGCGGACAAAACCAAGTGAAGGTGAGTTACAGATCGTGAACCTGCT 120  
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Db 241 CAAGACCTTGATAGGCTGCGCCCGCTCCCAAGAGTGGCCGCTATTAAACATGCACTTGC 300  
Qy 301 GGCCTCTCGGACCTTTACCTGATCAAGAGGACCGCCGATGTCATTCCTGTGCGCGACG 360  
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Db 1201 ATCCGACACAGTGTGAGCTGTGCTGCTGCACTGAGCGCTTCAAGAGCTTAC 1260  
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Qy 1381 CAACGTCGAGGATGAGCTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1440  
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Qy 1981 ATTGTCTGCTGCGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2040  
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Qy 2041 GATGAAATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2061  
Db 2041 GATGAAATGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2061

RESULT 2  
AR640522  
DEFINITION Sequence 16 from patent US 6858590.  
ACCESSION AR640522  
VERSION AR640522.1 GI:62775243  
KEYWORDS  
SOURCE  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 2061)  
AUTHORS Saliberg, M. and Hultgren, C.  
TITLE Vaccines containing ribavirin and methods of use thereof  
JOURNAL Parent: US 6858590-A 16 22-FEB-2005;  
TRIPER AB; Huddinge;  
SEX;  
FEATURES  
source location/Qualifiers  
1..2061

ORIGIN /organism="unknown"  
/mol\_type="genomic DNA"

Query Match 100.0%; Score 2061; DB 6; Length 2061;

Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

QY 1 ATGGGCGCTATACAGCGCCCTATATGCCCAGACAGACAGAGGGGCGCTTTGGATATGCTATAC 60  
DB 1 ATGGGCGCTATACAGCGCCCTATATGCCCAGACAGACAGAGGGGCGCTTTGGATATGCTATAC 60  
QY 61 AGCTTGACCGGCGGAGACAAAACAGAGTGAGGGTGAGGTTCAAGTCGTCACTGCT 120  
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DB 121 GCCCAGACTTTCTTGGCAACCTGCAATTACGGGGTGCTGTGGACCTGTCTAACATGAGGC 180  
QY 181 GGAAACAGAGCAATTGCGTCACTTAAGGCTCTGTATTATCCAGATGTAACCAATGTGAC 240  
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Db 2041 GATGAATGAGAGTGCTGA 2061

RESULT 3  
LOCUS AX441176 2061 bp DNA linear PAT 28-JUN-2002  
DEFINITION Sequence 16 from Patent WO0213855.  
ACCESSION AX441176  
VERSION AX441176.1 GI:21665758  
KEYWORDS  
SOURCE  
ORGANISM  
other sequences; artificial sequences.  
REFERENCE  
AUTHORS Sallberg, M. and Hultgren, C.  
TITLE Vaccines containing ribavirin and methods of use thereof  
JOURNAL Patent: WO 0213855-A 16 21-FEB-2002;  
TRIPEP AB (SE)  
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Query Match 100.0%; Score 2061; DB 6; Length 2061;  
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Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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RESULT 5  
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LOCUS HEC278830  
DEFINITION Hepatitis C virus genomic RNA for polypeptide gene.  
ACCESSION AJ278830  
VERSION AJ278830.1 GI:9843676  
KEYWORDS core protein; envelop protein 1; envelop protein 2; non-structural protein 2; non-structural protein 3; non-structural protein 4a; non-structural protein 4b; non-structural protein 5a; non-structural protein 5b; ORF1; ORF10; ORF2; ORF3; ORF4; ORF5; ORF6; ORF7; ORF8; ORF9; polypeptide.  
SOURCE Hepatitis C virus  
ORGANISM Hepatitis C virus  
Virus; ssRNA positive-strand viruses, no DNA stage; Flaviviridae; Hepacivirus.  
REFERENCE 1  
AUTHORS Kumar, U., Tsuchi, T., Thomas, H. C. and Monjardino, J.  
TITLE Sequence, expression and reconstruction of an HCV genome from a British isolate derived from a single blood donation  
J. Viral Hepat. 7 (6), 459-465 (2000)  
JOURNAL 11115058  
PUBMED 2 (baaes 1 to 9610)  
REFERENCE Kumar, U.  
AUTHORS Direct Submission  
TITLE Submitted (11-AUG-2000) Kumar U., Virology, GlaxoWellcome Research  
JOURNAL centre, Gunnels Wood Road, Stevenage, Hertfordshire, SG1 2NY.

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RESULT 6
LOCUS      AY615798 8791 bp RNA linear VRL 14-JUN-2004
DEFINITION Hepatitis C virus isolate HCV.TWB.1 polyprotein gene, partial cds.
ACCESSION AY615798
VERSION    AY615798.1 GI:48479029
KEYWORDS   Hepatitis C virus
SOURCE     Viruses; ssRNA positive-strand viruses, no DNA stage; Flaviviridae;
            Hepatitis C virus
ORGANISM   Hepatitis C virus
REFERENCE  1 (bases 1 to 8791)
            Brann,T.W., Kottlilil,S., Polis,M. and Imamichi,T.
            Identification of mutations associated with interferon resistance
            in HCV and HIV co-infected patients
            Unpublished
JOURNAL    2 (bases 1 to 8791)
            Brann,T.W., Kottlilil,S., Polis,M. and Imamichi,T.
            Direct Submision
            Submitted (03-MAY-2004) LHR/CSP, SAIC-Frederick, Inc, Building 550,
            Room 126, 1050 Boyles Street, Frederick, MD 21702, USA
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ORIGIN
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VERSION AX164584.1 GI:1454518  
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AUTHORS Colt,D.C., Medina-Selby,A.C., Selby,M.C. and Houghton,M.C.  
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SOURCE Unknown.  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 5360)  
AUTHORS Houghton, M., Choo, Q.-K. and Kuo, G.  
JOURNAL Patent: WO 8904669-A 8 01-JUN-1989;  
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TITLE	Nanbv diagnostics and vaccinee			
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FEATURES	Location/Qualifiers			

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VERSION AR118696.1 GI:14100606  
KEYWORDS  
SOURCE  
ORGANISM Unknown.  
REFERENCE Unclassified.  
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AUTHORS Chien,D.Y.  
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REFERENCE 1 (bases 1 to 7310)
AUTHORS Houghton,M., Choo,Q.-K. and Kuo,G.
JOURNAL Patent: WO 8904669-A 15 01-JUN-1989;
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Best Local Similarity 91.7%; Pred. No. 0;	
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BD091382 9185 bp DNA linear PAT 27-AUG-2002  
LOCUS BD091382 HCV cultivation method in eucaryotic cells.  
DEFINITION BD091382  
ACCESSION BD091382.1 GI:22636993  
VERSION JP 2001314192-A/3.  
KEYWORDS Homo sapiens (human)  
SOURCE Homo sapiens  
ORGANISM Homo sapiens  
Eukaryota; Metazoa; Chordata; Craniata; Vertebrata; Euteleostomi;  
Mammalia; Eutheria; Euarchontoglires; Primates; Catarrhini;  
Homnidae; Homo.  
REFERENCE 1 (bases 1 to 9185)  
AUTHORS Weiner A.J., Steimer K.S. and Houghton M.  
TITLE HCV cultivation method in eucaryotic cells  
JOURNAL Patent: JP 2001314192-A 3 13-NOV-2001;  
CHIRON CORP  
COMMENT OS Homo sapiens (human)  
PN JP 2001314192-A/3  
PD 13-NOV-2001  
PF 15-MAR-2001 JP 2001075114  
PR 25-AUG-1989 US 398667  
PI AMY J WEINER, KATHLEEN S STEIMER, MICHAEL HOUGHTON PC  
C12N15/09, C12N5/10, C12N7/00// (C12N7/00, C12R1:93), C12N15/00, PC  
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Query Match 86.7%; Score 1786; DB 6; Length 9185;  
Best Local Similarity 91.7%; Pred.No.0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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QY 2 TGGCGCTATACGCGCTATGCCAGACAGACAGGCGCTTTGGAGTGCATATACCA 61  
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LOCUS 108294 9185 bp DNA linear PAT 02-DEC-1994  
DEFINITION Sequence 1 from Patent EP 0388232.  
ACCESSION 108294  
VERSION 108294.1 GI:588994  
KEYWORDS  
SOURCE  
ORGANISM Unknown.  
REFERENCE 1 (bases 1 to 9185)  
AUTHORS Houghton, M., Choo, Q.-L. and Kuo, G.  
TITLE NAMBV diagnostics and vaccines  
JOURNAL Patent: EP 0388232-A1 1 19-SEP-1990;  
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ORIGIN  
Query Match 86.7%; Score 1786; DB 6; Length 9185;  
Best Local Similarity 91.7%; Pred. No. 0; Mismatches 170; Indels 0; Gaps 0;  
Matches 1088; Conservative 0

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QY 542 GGTCCCGGAGTGTCTCAGACAATCTCTCCCAAGAGTGCAGAGGCTTCAAGGTTG 601  
DB 3996 GGTCCCGGAGTGTCTCAGACAATCTCTCCCAAGAGTGCAGAGGCTTCAAGGTTG 601  
QY 602 CCCACTGATGCTTCCACCGGCAAGGTTAAGAGCAAGAGTCCCGGCGCATTCGAG 661  
DB 3996 CCACTGATGCTTCCACCGGCAAGGTTAAGAGCAAGAGTCCCGGCGCATTCGAG 661







XX The present invention relates to novel hepatitis C virus (HCV) NS3/4A  
CC proteins and their corresponding polynucleotides. NS3/4A sequences are  
CC useful for identifying the presence or absence of HCV in a subject. They are  
CC useful for preparing a medicament used for treating or preventing HCV  
CC infection. Sequences of the invention are also used as vaccines. The  
CC present sequence is a DNA encoding HCV NS3/4A protein

XX Sequence 2061 BP; 427 A; 616 C; 571 G; 447 T; 0 U; 0 Other;

Query Match 100.0%; Score 2061; DB 6; Length 2061;

Best Local Similarity 100.0%; Pred. No. 0;

Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 ATGGGCGCTATACAGGCGCTATGCGCAGACAGAGGGGCGCTTTGGAGATGATATACCC 60  
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61 AGCTTGACCGGCGCGGACAAAAACAGGTGAGAGGTTCAAGTCGTCAACTGCT 120  
61 AGCTTGACCGGCGCGGACAAAAACAGGTGAGAGGTTCAAGTCGTCAACTGCT 120  
121 GCCCAGACTTTCTTGGAACAACCTGCAATTAAGGGGTGTGTTGACATGTTCAATGAGGC 180  
121 GCCCAGACTTTCTTGGAACAACCTGCAATTAAGGGGTGTGTTGACATGTTCAATGAGGC 180  
181 GGAACAAGGACGATGGCGTCACTTAAGGGTCCGTGTTATCGAATGTAACCAATGTGAC 240  
181 GGAACAAGGACGATGGCGTCACTTAAGGGTCCGTGTTATCGAATGTAACCAATGTGAC 240  
241 CAAGAAGCTGTAGAGTGGCGCGCTCCCAAGGTGCGCGCTCATTAACACCATGACCTTGC 300  
241 CAAGAAGCTGTAGAGTGGCGCGCTCCCAAGGTGCGCGCTCATTAACACCATGACCTTGC 300  
301 GCGTCTCTGGGACCTTTACCTGTGACAGAGGACAGCGGATGATATTCGTGCGCGAGCG 360  
301 GCGTCTCTGGGACCTTTACCTGTGACAGAGGACAGCGGATGATATTCGTGCGCGAGCG 360  
361 GGTGATGGAGGGGAGCGCTTGTCGCGCGGCGCATCTTACTGTGAAGGCTCTCTCG 420  
361 GGTGATGGAGGGGAGCGCTTGTCGCGCGGCGCATCTTACTGTGAAGGCTCTCTCG 420  
421 GGAGGCGCTCTGTGTGCCCGCAGAGACATGCGTGAAGATTAAGAGCGCGGATATGC 480  
421 GGAGGCGCTCTGTGTGCCCGCAGAGACATGCGTGAAGATTAAGAGCGCGGATATGC 480  
481 ACCCGTGAAGTGGCTTAAGGCGGTGAATTCTATCCCGTGAAGAGCTTAGAGCAACCATG 540  
481 ACCCGTGAAGTGGCTTAAGGCGGTGAATTCTATCCCGTGAAGAGCTTAGAGCAACCATG 540  
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541 AGGTCCCGGCTGTCTCAAGCAACCTCTCCCAAGAGTGGCGCGGATGATACCAAGTG 600  
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601 GCCCAGCTGATGCTCCCAAGCGGAGGTAAGAGCAACCAAGTCCCGGCGCATACGCA 660  
661 GCTCAGGGCTTAAGAGTGTGTGTGCAACCCCTCGTGTGCAACAAATGGGCTTTGGT 720  
661 GCTCAGGGCTTAAGAGTGTGTGTGCAACCCCTCGTGTGCAACAAATGGGCTTTGGT 720  
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721 GCTTCAATGTCAAGGCGCATGGGATTAAGTCAATGAGATGAGGGGTGAAGCAATT 780  
781 ACTACTGAGGCGCGCATGACGTAATTCACCTACGCGAAGTCTTGGCGAGCGGGTGT 840  
781 ACTACTGAGGCGCGCATGACGTAATTCACCTACGCGAAGTCTTGGCGAGCGGGTGT 840  
841 TCAGGGGGGTGCTTATGACATTAATTAATTTGTGACGAGTGCACCTCCAGGATGCAACATCC 900  
841 TCAGGGGGGTGCTTATGACATTAATTAATTTGTGACGAGTGCACCTCCAGGATGCAACATCC 900

901 ATCTTGGGCAATTGGCACTGTCTCTTGAACCAAGCAGAGACCGCGGGGCGAGACTGACTGTG 960  
901 ATCTTGGGCAATTGGCACTGTCTCTTGAACCAAGCAGAGACCGCGGGGCGAGACTGACTGTG 960  
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1261 GGCAGACTTGATGCGGTATGAGCTGCAACAGTGTGCAACCGACAGTGTGACTTCAAGC 1320  
1321 CTGACCCCTTACCTTACCATTTAGAGCAATCAAGCTTCCCGAGATGTGTCTCCGTACT 1380  
1321 CTGACCCCTTACCTTACCATTTAGAGCAATCAAGCTTCCCGAGATGTGTCTCCGTACT 1380  
1381 CAACGTGGGGGTGAGGACCTGGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1440  
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1441 GAGCGTCTCTTGGGATGTTTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1500  
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1681 CTGTAGAGGTACCAAGCAACGCTGTGCGTGAAGCTCAAGCCCTCCCGCTGTGGAGAC 1740  
1681 CTGTAGAGGTACCAAGCAACGCTGTGCGTGAAGCTCAAGCCCTCCCGCTGTGGAGAC 1740  
1741 CAGATGTGGAAGTGTGATCCGTCTCAAGGCCCAACCTCCANTGGGCAACACTCTGTGTA 1800  
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1801 TATAGACTGGGCGCTGTCAAGATGAAGTCAACCTTGACGACCCAGTCAACCAAGTATATC 1860  
1861 ATGACATGATGTGCGGTGACCTGAGAGTGTGTCAAGAGTACTGTGAGTGTGTGTGTGTGT 1920  
1861 ATGACATGATGTGCGGTGACCTGAGAGTGTGTCAAGAGTACTGTGAGTGTGTGTGTGTGT 1920  
1921 GTTCTGGCTGCTTTGGCGCGGCTTAATGCTTATTCACAGGCTGTGTGTGTGTGTGTGTGT 1980  
1921 GTTCTGGCTGCTTTGGCGCGGCTTAATGCTTATTCACAGGCTGTGTGTGTGTGTGTGTGT 1980



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Qy 1981 ATTGCTCTGTCGGAAGAGCCGCAATCATACCCGACAGGGAAGTCTCTACCGGGAAGTTC 2040
Db 1981 ATTGCTCTGTCGGAAGAGCCGCAATCATACCCGACAGGGAAGTCTCTACCGGGAAGTTC 2040
Qy 2041 GATGAAATGGAAGAGTGTCTGA 2061
Db 2041 GATGAAATGGAAGAGTGTCTGA 2061

RESULT 2
AADD31767
ID AADD31767 standard; DNA, 2061 BP.
AC AADD31767;
XX
XX 18-JUN-2002 (first entry)
DE Hepatitis C virus (HCV) NS3/4A DNA coding region.
XX
XX Hepatitis C virus; HCV infection; virucide; fungicide; antibacterial;
XX cytoskeletal; immunostimulant; vaccine; ribavirin; immune response; cancer;
XX ds.
XX
XX Hepatitis C virus.
XX
XX Key Location/Qualifiers
XX CDS 1..2061
XX /tag="a
XX /product="HCV NS3/4A protein"
XX
XX MO200213855-A2.
XX
XX 21-FEB-2002.
XX
XX 15-AUG-2001; 2001WO-1B001808.
XX
XX 17-AUG-2000; 2000US-0225767P.
XX 29-AUG-2000; 2000US-0229175P.
XX 03-NOV-2000; 2000US-00705547.
XX
XX (TRIP-) TRIPEP AB.
XX
XX Salberg M, Hultgren C;
XX
XX MPI: 2002-241837/29.
XX P-PSDB; AME19900.
XX
XX Vaccine compositions for treating and preventing disease, preferably
XX hepatitis C virus infection, comprises ribavirin and antigen that has
XX epitope present in hepatitis C virus.
XX
XX Claim 1; Page 94-95; 120pp; English.
XX
XX The invention relates to a composition comprising ribavirin and an
XX antigen preferably non structural 3 protein (NS3)/4A fragment of
XX hepatitis C virus (HCV) genome or a peptide or nucleic acid of HCV
XX sequence. The composition is useful for enhancing an immune response to a
XX hepatitis C antigen in humans, domestic, sport or pet species and as
XX vaccines for treating and preventing HCV infections. The composition is
XX also useful for treating viral, bacterial, fungal diseases and cancer.
XX The present sequence is HCV NS3/4A DNA coding region
XX
XX Sequence 2061 BP; 427 A; 616 C; 571 G; 447 T; 0 U; 0 Other;
XX
Query Match 100.0%; Score 2061; DB 6; Length 2061;
Best Local Similarity 100.0%; Pred. No. 0;
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
Qy 1 AATGGGCGCTTATCAAGCCCTATGCCCCGACGACAAAGGGGCTTTTGGAGATCATATCAC 60
Db 1 AATGGGCGCTTATCAAGCCCTATGCCCCGACGACAAAGGGGCTTTTGGAGATCATATCAC 60
Qy 61 AACTTGACCGGCGGGAAGAAACAGAGTGAAGGAGTTCAGATCTGTCAACTGCT 120
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Db 61 AACTTGACCGGCGGGAAGAAACAGAGTGAAGGAGTTCAGATCTGTCAACTGCT 120
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Db 121 GCCGACCTTCTTGGCAACCTGATTAACGGGGGTGTGTGGACTGTACCATGGAAGCC 180
Qy 181 GGAAACAGAGACCATTCGTCACTTAAGGGTCTCTTATTCAGATGTAACCAATGTGAC 240
Db 181 GGAAACAGAGACCATTCGTCACTTAAGGGTCTCTTATTCAGATGTAACCAATGTGAC 240
Qy 241 CAAGACTGTGAGGCTGGCCGCTCCCAAGGTGCCCCCTATTAAACACATGCACTTGC 300
Db 241 CAAGACTGTGAGGCTGGCCGCTCCCAAGGTGCCCCCTATTAAACACATGCACTTGC 300
Qy 301 GGCTCTCGGACCTTTACCTGTGCAAGAGGACGCGGATGCACTTCGTGGCGGACGG 360
Db 301 GGCTCTCGGACCTTTACCTGTGCAAGAGGACGCGGATGCACTTCGTGGCGGACGG 360
Qy 361 GGATGATGACAGGAGGAGCTGCTTTCGCCCCGCTATCTCTTACCTTGAAGGCTCTGC 420
Db 361 GGATGATGACAGGAGGAGCTGCTTTCGCCCCGCTATCTCTTACCTTGAAGGCTCTGC 420
Qy 421 GGAGGCTCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Db 421 GGAGGCTCTGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480
Qy 481 ACCCGTGAAGTGGCTTAAGAGGCGGTGACCTTCACTCCCGTGAAGAGCTTGAAGCAAC 540
Db 481 ACCCGTGAAGTGGCTTAAGAGGCGGTGACCTTCACTCCCGTGAAGAGCTTGAAGCAAC 540
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Db 541 AGTCCCGGCTGCTTCTCAGACCACTCTCCGACGAGAGTCCCGACAGTACCAAGTG 600
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Db 601 GCCGACCTGATGCTTCCCAACCGGAGCGGTAAAGACCAAGGTCGCGGCTCATACGCA 660
Qy 661 GCTCAGGCGTCAAGAGTGTGTGCTCAACCCCTCGTGTGCTGCAACAATGGGCTTTGCT 720
Db 661 GCTCAGGCGTCAAGAGTGTGTGCTCAACCCCTCGTGTGCTGCAACAATGGGCTTTGCT 720
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Db 721 GCTTACATGTCGAAGGCGCATGGAATGATCTTACATCAAGAGTGGGGTGAACAAT 780
Qy 781 ACTTGGCAGCCGATCAAGTATTCACCTTACGGAAGTTCCTTCCGACGCGGCTGT 840
Db 781 ACTTGGCAGCCGATCAAGTATTCACCTTACGGAAGTTCCTTCCGACGCGGCTGT 840
Qy 841 TCAGGGGGTGTCTTATGACATTAATTTGTGACGAGTGCCTTCCAGGATGCAACATTC 900
Db 841 TCAGGGGGTGTCTTATGACATTAATTTGTGACGAGTGCCTTCCAGGATGCAACATTC 900
Qy 901 ACTTGGGATTTGAGACTGTCTTACCAAGAGAGACCGGGGGCGAGATGACTG 960
Db 901 ACTTGGGATTTGAGACTGTCTTACCAAGAGAGACCGGGGGCGAGATGACTG 960
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Db 1021 GCTGTGTCACATACCGAGAGATCCCTTTATGCAAGGCTATTCCTTGAAGCAAT 1080
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Db 1081 AAGGGGGGAGACATCTATCTTCCACTCAAGAAAGAAAGTGAAGAGAGTGGCGGCA 1140
Qy 1141 AAAGTGTGCGCTTGGGGCTCAAGTCCGTGCTTCAACCGGCGGCTGATGTCTGCT 1200
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Db 1141 AAACGTGTCGCGTGGGCGTCAATGCGCGCTTACACCGCGCGCTTGATGTGTCGTC 1200
Qy 1201 ATCCGACCAAGTGTGACGTTTCCGTCGTCGCAACGAGCCCTCAATGACCGGCTTTACC 1260
Db 1201 ATCCGACCAAGTGTGACGTTTCCGTCGTCGCAACGAGCCCTCAATGACCGGCTTTACC 1260
Qy 1261 GCGGCACTTGTGATTCGGTGTAGACTGCAACAGTGTGTCAACCCAGACAGTCCGACTTACG 1320
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Qy 1321 CTTTGACCCCTTCACTTCAATGACATCAAGCTTCCGAGAGTGTCTCCGCTACT 1380
Db 1321 CTTTGACCCCTTCACTTCAATGACATCAAGCTTCCGAGAGTGTCTCTCCGCTACT 1380
Qy 1381 CAACGTCGGGGGTAGACTGCGAGAGGAGCCAGAGATTAAGATTGTGGACCCGGG 1440
Db 1381 CAACGTCGGGGGTAGACTGCGAGAGGAGCCAGAGATTAAGATTGTGGACCCGGG 1440
Qy 1441 GAGCGTCTTCTGCACTGTTTGACTGTCTGTCTCTGCGAGTGTATGACCGGGTGT 1500
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Db 1801 TATTAAGCTGGGCGCTGTCCAGATGAATGACCTTGAACGCAACCAAGTCAATATATC 1860
Qy 1861 ATGACATGTATGTCCGCTGACCTGAGAGTGTCAAGATTAAGTCTGTGGCGGAC 1920
Db 1861 ATGACATGTATGTCCGCTGACCTGAGAGTGTCAAGATTAAGTCTGTGGCGGAC 1920
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Qy 2041 GATGAATGAAAGAGTCTGA 2061
Db 2041 GATGAATGAAAGAGTCTGA 2061
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RESULT 3
AAd60868 standard; DNA; 2061 BP.
XX
AC AAd60868;
XX
DT 15-JAN-2004 (first entry)
XX
DE Hepatitis C virus NS3/4A DNA.
XX
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KW Ribavirin; vaccine; immune response; infection; therapy; immunostimulant;
KM virucide; ds.
XX
OS Hepatitis C virus.
XX
FH Key Location/Qualifiers
FT 1..2061
FT CDS /tag=a
FT /product= "Hepatitis C virus protein"
XX
PN US2002136740-A1.
XX
PD 26-SEP-2002.
XX
PF 15-AUG-2001; 2001US-00929955.
XX
PR 17-AUG-2000; 2000US-0225767P.
PR 29-AUG-2000; 2000US-0229175P.
XX
PA (SALT/) SALLBERG M.
PA (HUT/) HUTIGREN C.
XX
PI Sallberg M, Hultgren C;
XX
DR WPI; 2003-764978/72.
DR P-PsDB; ABW00351.
XX
PT Vaccine compositions for treating and preventing disease, preferably
PT hepatitis C virus infection, comprises ribavirin and antigen that has
PT epitope present in hepatitis C virus.
XX
PS Claim 1, Page 60-61; Op; English.
XX
CC The invention relates to a composition comprising ribavirin and an
CC antigen, where the antigen is derived from a hepatitis virus. The vaccine
CC is useful in enhancing the immune response to a hepatitis C antigen where
CC the composition is delivered to an animal identified as requiring an
CC enhanced immune response. The vaccine is useful in the treatment and
CC prevention of hepatitis C infection. The present sequence is Hepatitis C
CC virus NS3/4A DNA
XX
SQ Sequence 2061 BP; 427 A; 616 C; 571 G; 447 T; 0 U; 0 Other;
XX
Query Match 100.0%; Score 2061; DB 10; Length 2061;
Beef Local Similarity 100.0%; Pred. No. 0;
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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Db 1 ATGGGCGCTATCACGGCTATGCGCCAGACGACGAGGCGCTTTGGAGTGAATATCACC 60
Qy 61 AGCTTGAACCGGCGGGAAGAAACAGAGTGAAGGTGAGTTCAGATCTGTCAACTGCT 120
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Db 661 GCTCAGGGCTACAAAGTGTGCTCAACCCCTCGTTCGCAACAATGAGCTTTGGT 720
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Qy 781 ACTACTGGCAGGCGCATCACTGATTCACCTACCGCAAGTTCCTTGGCGCAGCGGGTGT 840
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Qy 1441 GAGCGTCTCTTCTGGCATGTTTGAATCTGTCCTCTGCGAGTGTCTATGACCGGGGTGT 1500
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Qy 1741 CAGATGTGAAGTGTGCTTGAATCCGTCAAGCCCATCTTCATGAGGCAACCTCTGCTA 1800
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Db 1861 ATGACATGATGTGGCTGACCTGAGAGTGTGACAGAGTACTGGGTGCTGTTGGCGGC 1920
Qy 1921 GTTCTGCTGCTTTTGGCGCGATTCCTATTCACAGGCTGGGTGCTATGATAGTAGG 1980
Db 1921 GTTCTGCTGCTTTTGGCGCGATTCCTATTCACAGGCTGGGTGCTATGATAGTAGG 1980
Qy 1981 ATTGTCTTGTCCGGAAGCCGCAATCATATCCGACAGGGAAGTCTTACCGGAGTTTC 2040
Db 1981 ATTGTCTTGTCCGGAAGCCGCAATCATATCCGACAGGGAAGTCTTACCGGAGTTTC 2040
Qy 2041 GATGAATGGAAGAGTGTGCA 2061
Db 2041 GATGAATGGAAGAGTGTGCA 2061

RESULT 4
ADG47658
ID ADG47658 standard; DNA; 2061 BP.
XX
AC ADG47658;
XX
DT 11-MAR-2004 (first entry)
XX
DE HCV NS3/4A domain DNA.
XX
KW ds; gene; immunogen; hepatitis C virus; HCV infection; vaccine.
XX
OS Hepatitis C virus.
XX
FH Key Location/Qualifiers
FT CDS 1..2061
FT FT /*tag= a
FT FT /product= "NS3/4A domain"
PN US2003206919-A1.
XX
PD 06-NOV-2003.
XX
PF 26-NOV-2002; 2002US-00307047.
XX
PR 17-AUG-2000; 2000US-0225767P.
PR 29-AUG-2000; 2000US-0228175P.
PR 15-AUG-2001; 2001US-0092995J.
PR 15-AUG-2001; 2001US-0093059J.
XX
PA (SALL/) SALLBERG M.

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XX Salberg M;  
PI  
XX  
DR MPI: 2004-051480/05.  
DR P-PSDB; ADG47659.

PT New purified or isolated nucleic acid useful for enhancing an immune  
XX response to a hepatitis C antigen comprises specific nucleotide sequences  
PT and the amino acid sequences.

XX Example 1; SEQ ID NO 1; 83bp; English.

XX The invention relates to a purified or isolated nucleic acid. The  
XX peptides are useful as immunogens for the treatment and prevention of  
CC hepatitis C virus (HCV) infection, in vaccine and immunogen compositions.  
CC The nucleic acid and the peptide enhance an immune response to a  
CC hepatitis C antigen and are potent immunogens. The present sequence is  
CC used in the exemplification of the invention.

XX Sequence 2061 BP; 427 A; 616 C; 571 G; 447 T; 0 U; 0 Other;

Query Match 100.0%; Score 2061; DB 12; Length 2061;

Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

```
QY 1 ATGGGCGCTATACGCGCTATGCGCGAGACAAAGGGGCTTTTGGAGATGCAATATCAC 60
DB 1 ATGGGCGCTATACGCGCTATGCGCGAGACAAAGGGGCTTTTGGAGATGCAATATCAC 60
QY 61 AGCTTGACCGGCGGAGACAAAAACAGGTGAGGGGTGAGGTTCAATGCTGTCAACTGCT 120
DB 61 AGCTTGACCGGCGGAGACAAAAACAGGTGAGGGGTGAGGTTCAATGCTGTCAACTGCT 120
QY 121 GCGCGACCTTTTGGCAACCTTGCAATTAACGGGGTGTGTGAACTGTCTACATGGAAGC 180
DB 121 GCGCGACCTTTTGGCAACCTTGCAATTAACGGGGTGTGTGAACTGTCTACATGGAAGC 180
QY 181 GGAACAAAGGACCAATTGCGTACCTAAGGGTCTGTTATCCAGATGTAACCAATGTGAGC 240
DB 181 GGAACAAAGGACCAATTGCGTACCTAAGGGTCTGTTATCCAGATGTAACCAATGTGAGC 240
QY 241 CAAGACTTGTAAGCTGCGCGCTCCCAAGGTGCCCGCTCATTAACCATGACACTTTC 300
DB 241 CAAGACTTGTAAGCTGCGCGCTCCCAAGGTGCCCGCTCATTAACCATGACACTTTC 300
QY 301 GCGTCTCGGACCTTTAATCTGTGTCAAGAGGCAAGCCGATGCTATTCCTGTGCGCGA 360
DB 301 GCGTCTCGGACCTTTAATCTGTGTCAAGAGGCAAGCCGATGCTATTCCTGTGCGCGA 360
QY 361 GGTGATGGGAGGGGAGCGCTGCTTTGACCGCGGCTATCTTTAATTGAAAGGCTCTCG 420
DB 361 GGTGATGGGAGGGGAGCGCTGCTTTGACCGCGGCTATCTTTAATTGAAAGGCTCTCG 420
QY 421 GGAAGGCGCTCTGTGTGCGCGAGAGCAATGCGTGAAGGATTAACAGCGCGGTATGC 480
DB 421 GGAAGGCGCTCTGTGTGCGCGAGAGCAATGCGTGAAGGATTAACAGCGCGGTATGC 480
QY 481 ACCCGTGAAGTGGCTTAAGCGCGGTGACTTCAATCCCGTGAAGAGCTTAAGAACACATG 540
DB 481 ACCCGTGAAGTGGCTTAAGCGCGGTGACTTCAATCCCGTGAAGAGCTTAAGAACACATG 540
QY 541 AGGTCCCGGCTGTTCTCAGACAACTCTGCCACAGAGAGTGGCGGAGCTTAACCAAGG 600
DB 541 AGGTCCCGGCTGTTCTCAGACAACTCTGCCACAGAGAGTGGCGGAGCTTAACCAAGG 600
QY 601 GCGCACTTGATGCTCTCCACCGGAGCGGTAAGAGCAACAGGTCCCGGCGGATACGCA 660
DB 601 GCGCACTTGATGCTCTCCACCGGAGCGGTAAGAGCAACAGGTCCCGGCGGATACGCA 660
QY 661 GCTCAGGGGCTTAAGGTGCTGTGCTCAACCCCTCGTGTGCAACATGGGCTTTTGGT 720
DB 661 GCTCAGGGGCTTAAGGTGCTGTGCTCAACCCCTCGTGTGCAACATGGGCTTTTGGT 720
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QY 721 GCTTACATGTCACAGGCCCATGGATGATGATCTTAACATCAGACCTGGGTGAGCAAT 780
DB 721 GCTTACATGTCACAGGCCCATGGATGATGATCTTAACATCAGACCTGGGTGAGCAAT 780
QY 781 ACTACTGACAGCCGATCACTGATTCACCTTACGGCAAGTTCTTGGCAGCGCGGCTGT 840
DB 781 ACTACTGACAGCCGATCACTGATTCACCTTACGGCAAGTTCTTGGCAGCGCGGCTGT 840
QY 841 TCAGGGGGTGGCTTATGACATATATTTGTGACGAGTGCACCTCCAGGATGCAACATCC 900
DB 841 TCAGGGGGTGGCTTATGACATATATTTGTGACGAGTGCACCTCCAGGATGCAACATCC 900
QY 901 ATCTTGAGGCAATTTGCACTGTCTTGGACCAAGCAGACCGCGGGGCGAGACTGTG 960
DB 901 ATCTTGAGGCAATTTGCACTGTCTTGGACCAAGCAGACCGCGGGGCGAGACTGTG 960
QY 961 CTGCGCACCGCTACCCCTCCGGGCTCCGTCACCTGTGCCCATCTAACATCGAGAGGTT 1020
DB 961 CTGCGCACCGCTACCCCTCCGGGCTCCGTCACCTGTGCCCATCTAACATCGAGAGGTT 1020
QY 1021 GCTCTGTCACTACCGGAGAGATCCCTTTATGCGAAGGCTATCCCTTGAAGCAAT 1080
DB 1021 GCTCTGTCACTACCGGAGAGATCCCTTTATGCGAAGGCTATCCCTTGAAGCAAT 1080
QY 1081 AAGGGGGGAGACATCTCATCTTTCGCCACTCAAGAAAGAGTGGAGAGCTCGCGCA 1140
DB 1081 AAGGGGGGAGACATCTCATCTTTCGCCACTCAAGAAAGAGTGGAGAGCTCGCGCA 1140
QY 1141 AAACGTGCGGCTTGGGCGTCAATGCGGCTTACCTACCGGCGCTTGTATGTTCGTC 1200
DB 1141 AAACGTGCGGCTTGGGCGTCAATGCGGCTTACCTACCGGCGCTTGTATGTTCGTC 1200
QY 1201 ATCCGACAGAGTGGAGGCTGTGCTGCTGAGCAATGACGCGCTCATGACCGGCTTAC 1260
DB 1201 ATCCGACAGAGTGGAGGCTGTGCTGCTGAGCAATGAGCGGCTCATGACCGGCTTAC 1260
QY 1261 GCGCACTTCGATTCGGTATGACTGCAACAGCTGTGTACCCAGACAGTGCACCTTAC 1320
DB 1261 GCGCACTTCGATTCGGTATGACTGCAACAGCTGTGTGTACCCAGACAGTGCACCTTAC 1320
QY 1321 CTGACCTTACCTTACCACTTGAAGCAATCAGCTTCCCAAGAGTGTCTCCGTA 1380
DB 1321 CTGACCTTACCTTACCACTTGAAGCAATCAGCTTCCCAAGAGTGTCTCCGTA 1380
QY 1381 CAAGCTGGGGGTGAGGACTGGGAGAGGAGGAGCACTTACAGTTTGGCAACGGGG 1440
DB 1381 CAAGCTGGGGGTGAGGACTGGGAGAGGAGGAGCACTTACAGTTTGGCAACGGGG 1440
QY 1441 GAGCGTCTTCTGCGATGTTGACTGCTGTCTCTGTGAGTGTATGACCGGGTGT 1500
DB 1441 GAGCGTCTTCTGCGATGTTGACTGCTGTCTCTGTGAGTGTATGACCGGGTGT 1500
QY 1501 GCTTGTATGACTTACCGCGCGAGACCAAGTTAGGCTTACGAGCATACATGAACAC 1560
DB 1501 GCTTGTATGACTTACCGCGCGAGACCAAGTTAGGCTTACGAGCATACATGAACAC 1560
QY 1561 CCGGCACTTCCCGTGTGCAAGACATCTTGAATTTGGAGGGGCTTTTACGGGCTTC 1620
DB 1561 CCGGCACTTCCCGTGTGCAAGACATCTTGAATTTGGAGGGGCTTTTACGGGCTTC 1620
QY 1621 ACCCATATAGACGCCCATCTTCTATCCAGCAAAAGCAGAGTGGGAAAACTTCCAT 1680
DB 1621 ACCCATATAGACGCCCATCTTCTATCCAGCAAAAGCAGAGTGGGAAAACTTCCAT 1680
QY 1681 TTGTAAGGTACAAAGCAACGCTGTGCTAGAGCTCAAGCCCTTCCCGTGTGGAC 1740
DB 1681 TTGTAAGGTACAAAGCAACGCTGTGCTAGAGCTCAAGCCCTTCCCGTGTGGAC 1740
QY 1741 CAGATGTGAAGTGTATATCCGTCTCAAGCCCACTCCANTGGGCAACACTCTGCTA 1800
DB 1741 CAGATGTGAAGTGTATATCCGTCTCAAGCCCACTCCANTGGGCAACACTCTGCTA 1800
QY 1801 TATAGACTGGGCGCTGTCCAGATGAGTCACTGACGCAACCAAGTCAACAAATATATC 1860
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Db 1801 TATAGACTGGGGGGCTGTCCAGATGAAATGACCCCTGAGCAGCACCAGTCAACCAAGATATTC 1860
Qy 1861 ATGACATATATATGTCGGCTGACCTGAGAGTCTGTCAAGATACCTGGGTCTGTGGCCGC 1920
Db 1861 ATGACATATATGTCGGCTGACCTGAGAGTCTGTCAAGATACCTGGGTCTGTGGCCGC 1920
Qy 1921 GTTCTGCTGCTTGGCGCGATTTGACCTATCCACAGGCTGCGTGTATAGTAGTAGG 1980
Db 1921 GTTCTGCTGCTTGGCGCGATTTGACCTATCCACAGGCTGCGTGTATAGTAGTAGG 1980
Qy 1981 ATTGCTTTGTCGCGAAGCCCGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTC 2040
Db 1981 ATTGCTTTGTCGCGAAGCCCGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTC 2040
Qy 2041 GATGAAATGGAAGAGTCTGA 2061
Db 2041 GATGAAATGGAAGAGTCTGA 2061

RESULT 5
AAF83669
ID AAF83669 standard; DNA; 6299 BP.
AC AAF83669;
XX
DT 23-JUN-2001 (first entry)
XX
DE HCV NS34A ORF comprising PCMV-NS34A nucleic acid sequence.
XX
KW HCV; mutant; non-structural protein; NS; hepatitis C virus; mutation;
KM catalytic domain; NS3; NS4; NS5; antiviral; vaccine; immunostimulant;
KM immunotherapy; NS34A; db.
XX
OS Synthetic.
OS Hepatitis C virus.
XX
FH Key Location/Qualifiers
FT CDS 1990..4050
FT /tag= a
FT /product= "NS34A"
XX
PN MO200138360-A2.
XX
PD 31-MAY-2001.
XX
PF 22-NOV-2000; 2000MO-US032326.
XX
PR 24-NOV-1999; 99US-0167502P.
XX
PA (CHIR ) CHIRON CORP.
XX
PI Colt D, Medina-Selby A, Selby M, Houghton M;
DR WPI; 2001-343948/36.
DR P-PSDB; AAB62633.
XX
FT Mutant non-structural (NS) Hepatitis C virus (HCV) polypeptide, useful as
FT a vaccine against HCV, comprises a polypeptide having a mutation that
FT functionally disrupts the catalytic domain of NS3.
XX
PS Dieckhouse; Fig 9, 340pp; English.
XX
CC The invention relates to an isolated mutant non-structural (NS) Hepatitis
CC C virus (HCV) polypeptide, comprising a polypeptide having a mutation in
CC the catalytic domain of NS3, where the mutation functionally disrupts the
CC catalytic domain. The NS mutant polypeptides can include NS3, NS4 (NS4a
CC and NS4b) NS5 (NS5a and NS5b) or portions thereof. The HCV polypeptide
CC and polynucleotide (preferably DNA or a plasmid) compositions can be used
CC in vaccines against HCV and as diagnostics. The antibodies raised against
CC these polypeptides can also be used as diagnostics, or for passive
CC immunotherapy. The antibodies are also useful for isolating and
CC identifying HCV particles. The present sequence represents the nucleic
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CC acid sequence of the PCMV-NS34A comprising the ORF encoding a NS34A
CC polypeptide
xx
SQ Sequence 6299 BP; 1449 A; 1713 C; 1637 G; 1500 T; 0 U; 0 Other;
Query Match 86.7%; Score 1787; DB 4; Length 6299;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1889; Conservative 0; Mismatches 170; Indels 0; Gaps 0;
Qy 1 ATGGGCGCTATCAGGGCTTATGCCCAGACAGAGGGGCTTTTGGATGCTATATCAC 60
Db 1990 ATGGGCGCCATCAGCGCTTACGCCCAGACAGAGGGGCTTCTTGGATGCTATATCAC 2049
Qy 61 AGCTTGACCGGCGGGGACAAAAACAGGTGAGGGGTGAGTTCAAGTGTGCACTGCT 120
Db 2050 AGCTTACTGGCCGGGACAAAAACCAAGTGAAGGTGAGTTCAGATTGTGCACTGCT 2109
Qy 121 GCCCAGACTTCTTGGCAACTGTCAATTACGGGGGTGTGGACTGTCTACCATGAGCC 180
Db 2110 GCCCAACCTTCTGTGGCAACGTGATCAATGGGGGTGTGCTGGACTGTCTACCA 2169
Qy 181 GGAACAGAGACCATTTGGCTGACCTTAAGGGTCTGTATTCAGATGTACCAATGTGAC 240
Db 2170 GGAACAGAGACCATTCGCTGACCCCAAGGGTCTGTGATCAAGATGTATACCAATGTAGC 2229
Qy 241 CAAGACCTGTAAAGGTGGCCCGCTCCCAAGGTGGCCGCTCATTAACCAATGACTTGC 300
Db 2230 CAAGACCTGTAAAGGTGGCCCGCTTTCGCAAGGTACCCGCTCATTAACCAATGACTTGC 2289
Qy 301 GGCTCTCTGGAACCTTTACCTGTGTACGAGGACCGCGATGTCACTTCTGTGGCCGAC 360
Db 2290 GGCTCTCTGGAACCTTTACCTGTGTACGAGGACCGCGATGTCACTTCTGTGGCCGAC 2349
Qy 361 GGTGATGCGAGGGGACGCTGTCTTCCCGCGCTATCTCTTACTTGAAGGCTCTCG 420
Db 2350 GGTGATGCGAGGGGACGCTGTCTTCCCGCGCTATCTCTTACTTGAAGGCTCTCG 2409
Qy 421 GGAAGCCCTCTGCTGTGTCGCGCGGACGATGCGGATGAGCAATTCAGAGCGCGGTATGC 480
Db 2410 GGAAGCCCTCTGCTGTGTCGCGCGGACGCGCGGATGAGCAATTCAGAGCGCGGTATGC 2469
Qy 481 ACCGCTGAGATGAGCTTAAGCGGTGTGACTTCACTCCCGGTAGAGAGCTTGAAGCAACATG 540
Db 2470 ACCGCTGAGATGAGCTTAAGCGGTGTGACTTCACTCCCGGTAGAGAGCTTGAAGCAACATG 2529
Qy 541 AGTTCCTCCGGTGTCTCAAGCAACTCTTCCCAACGAGTGTCCCAAGCTTCAAGTGTG 600
Db 2530 AGTTCCTCCGGTGTCTCAAGCAACTCTTCCCAACGAGTGTCCCAAGCTTCAAGTGTG 2589
Qy 601 GCCACCTGCAATGCTCCCAACCGGACGGGTAAAGACCAAGGTCCGGGCGCATATGCA 660
Db 2590 GCTACCTTCATGCTCCCAACGAGCGGCAAAAGACCAAGGTCCGGGCGCATATGCA 2649
Qy 661 GCTCAGGGCTTCAAGAGTGTGTGTCAACCCCTCTGTTGTGTGCAACATGAGGCTTGTGT 720
Db 2650 GCTCAGGGCTTCAAGAGTGTGTGTGTCAACCCCTCTGTTGTGTGCAACATGAGGCTTGTGT 2709
Qy 721 GCTTACATGTCCAAAGGCCCATATGATATCTTAACTCAATCAGAGCTGGGGTGAACAATT 780
Db 2710 GCTTACATGTCCAAAGGCCCATATGATATCTTAACTCAATCAGAGCTGGGGTGAACAATT 2769
Qy 781 ACTACTGGCAGCCCGATACAGTATTCACACTTACCGGCAAGTTCTTGGACGCGGGGGT 840
Db 2770 ACTACTGGCAGCCCGATACAGTATTCACACTTACCGGCAAGTTCTTGGACGCGGGGGT 2829
Qy 841 TCAGGGGGTGTGTATGACATATATTTGTGACGAGTGTCCACTCCAGGATGCAATCC 900
Db 2830 TCAGGGGGTGTGTATGACATATATTTGTGACGAGTGTCCACTCCAGGATGCAATCC 2889
Qy 901 ATCTTGGGCAATGGCACTGTCTTGAACCAAGAGACCGCGGGGCGCAACTGCTGTG 960
Db 2890 ATCTTGGGCAATGGCACTGTCTTGAACCAAGAGACTGTGCGGGGCGCAACTGCTGTG 2949
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QY 961 CTGGCACCAGTACCCCTCCGGGCTCCGTCACGTCGTCCTTAACATGAGAGGTT 1020
DB 2950 CTGGCACCAGTACCCCTCCGGGCTCCGTCACGTCGTCCTTAACATGAGAGGTT 3009
QY 1021 GCTGTGTCATTCACGAGAGATCCCTTTTATGCGAAGGCTATTCCTCTTGAGCAATT 1080
DB 3010 GCTGTGTCATTCACGAGAGATCCCTTTTATGCGAAGGCTATTCCTCTTGAGCAATT 3069
QY 1081 AAGGGGGGAGACATCTCATCTTTGCGCACTCAAAAGAAAGATGCGAGCTCGCCGCA 1140
DB 3070 AAGGGGGGAGACATCTCATCTTTGCGCACTCAAAAGAAAGATGCGAGCTCGCCGCA 3129
QY 1141 AAATGATGCGCTTGGGCGCTCAATGCGCGGCTTACTACCGGCGCTTGATGTCGCTC 1200
DB 3130 AAGCTGTGTCATTCGCGCATCAATGCGCGCTTACTACCGGCGCTTGATGTCGCTC 3189
QY 1201 ATCCGACCAATGTCAGCTTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1260
DB 3190 ATCCGACCAATGTCAGCTTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3249
QY 1261 GCGGCACTTGCATTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1320
DB 3250 GCGGCACTTGCATTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3309
QY 1321 CTGACCCCTACCTTCACGATTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1380
DB 3310 CTGACCCCTACCTTCACGATTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3369
QY 1381 CAACGTCGCGGATGAGCACTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1440
DB 3370 CAACGTCGCGGATGAGCACTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3429
QY 1441 GAGCGCTCTTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1500
DB 3430 GAGCGCTCTTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3489
QY 1501 GCTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1560
DB 3490 GCTTGTATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3549
QY 1561 CCGGGACCTTCCCGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1620
DB 3550 CCGGGACCTTCCCGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3609
QY 1621 ACCCATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1680
DB 3610 ACCCATATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3669
QY 1681 CTGTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1740
DB 3670 CTGTCATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3729
QY 1741 CAGATGTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1800
DB 3730 CAGATGTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3789
QY 1801 TTTAATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1860
DB 3790 TTTAATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3849
QY 1861 ATGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1920
DB 3850 ATGACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 3909
QY 1921 GTTCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1980
DB 3910 GTTCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3969
QY 1981 ATTGTCTTGTCCGGAAGCCGCAATCATACCGAGAGAGAGAGAGAGAGAGAGAGAGAG 2040
DB 3970 ATTGTCTTGTCCGGAAGCCGCAATCATACCGAGAGAGAGAGAGAGAGAGAGAGAGAG 4029
QY 2041 GATGAATGGAAGAGTCT 2059

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DB 4030 GATGATGGAAGAGTCT 4048
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RESULT 6
AAN92106
ID AAN92106 standard; DNA; 7310 BP.
XX
AC AAN92106;
XX
DT 09-SEP-2004 (revised)
DT 25-MAR-2003 (revised)
DT 02-MAR-1990 (first entry)
XX
DE Combined ORFs of the HCV cDNAs from clones K9-1 through 15e.
XX
KW Hepatitis C virus; HCV; non-A, non-B hepatitis; NANBH; ss.
OS Hepatitis C virus.
OS Unidentified.
XX
Key Location/Qualifiers
FH 3.7310
FT /*tag= a
XX
PN EP318216-A.
XX
PD 31-MAY-1989.
XX
PF 18-NOV-1988; 88EP-00310922.
XX
PR 18-NOV-1987; 87US-00122714.
PR 30-DEC-1987; 87US-00139886.
PR 26-FEB-1988; 88US-00161072.
PR 06-MAY-1988; 88US-00191263.
PR 26-OCT-1988; 88US-00263584.
PR 14-NOV-1988; 88US-00271450.
XX
PA (CHIR ) CHIRON CORP.
PA (CHIR ) CHIRON CORP.
PI Houghton M, Choo QL, Kuo G;
PI
XX
DR MPI: 1989-159274/22.
DR P-PSDB; AAP92050.
XX
PT Purified hepatitis C virus - and associated nucleic acids and
PT polypeptide(s).
XX
PS Claim 3; Fig 47-1 - 47-8; 139pp; English.
XX
CC It is a double-stranded nucleotide sequence of the open reading frame
CC (ORF) (tag a) extending through clones K9-1 to 15e of hepatitis C virus
CC (HCV) cDNA. It can be used to make oligomeric DNA hybridisation probes to
CC detect the presence of HCV nucleic acids in samples. The polypeptide(s)
CC it encodes could be used as immunosay reagents and vaccines and to
CC generate antibodies useful in diagnosis and passive immunotherapy for HCV
CC infection/non-A, non-B hepatitis. (Updated on 25-MAR-2003 to correct PR
CC field.) (Updated on 25-MAR-2003 to correct PI field.)
CC
CC Revised record issued on 09-SEP-2004 : Correction to keywords
XX
SQ Sequence 7310 BP; 1491 A; 2217 C; 2058 G; 1540 T; 0 U; 4 Other;
XX
Query Match 86.7%; Score 1786; DB 1; Length 7310;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;
QY 2 TGGGCGCTATACAGCGCTATGCGCGAGCAAGAGCGCTTTGGATGCAATATCAACA 61
DB 1729 TGGGCGCTATACAGCGCTATGCGCGAGCAAGAGCGCTTTGGATGCAATATCAACA 1788
QY 62 GCTTACCGGCGGAGCAAAAAACGATGAGAGGTGAGGTTGAGATCGTCAACTGCTG 121

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Db 1789 GCTTACGTGCGGGGCAAAAACCAAGTGAAGGTGAGGTCCAGATTGTGTCACTGCTG 1848  
Qy 122 CCCAATCTTCTTGGCAACCTGCATTTAACGGGGTGTGTGAACTGTCTACATGAGCCG 181  
Db 1849 CCCAAACCTTCTTGGCAAGTGCATCAAGGGGTGTGTGAACTGTCTACACGGGGCG 1908  
Qy 182 GAACAAGGACATTCGTCACTTAAGGGTCTGTTATCCAGATGTACACCAATGTGAGCC 241  
Db 1909 GAACAGAGACATTCGGGTCAACCAAGGGTCTGTGTATCCAGATGTATACCAATGTAGACC 1968  
Qy 242 AAGACCTGTAGAGCTGCGCCGCTCCCAAGGTGCGGCTCATTTAACACCATGCTTGG 301  
Db 1969 AAGACTTGTGGGCTGCGCCGCTCCGCAAGTATAGCCGCTCATTTGACACCTGCATTTGG 2028  
Qy 302 GCTCTCTGGACCTTTAATCTGTGACAGAGGACCGGATGTCAATCTCTGTGCGCCGACGG 361  
Db 2029 GCTCTCTGGACCTTTAATCTGTGACAGAGGACCGGATGTCAATCTCTGTGCGCCGACGG 2088  
Qy 362 GTGATGGGAGGGGCAAGCCTGCTTTGGCCCGGGCTATCTTACTTGAAGGCTCTGG 421  
Db 2089 GTGATGAGAGGGGCAAGCCTGCTGTGCGCCCGGCTATCTTACTTGAAGGCTCTCTGG 2148  
Qy 422 GAGGCCCTCTGTGTGCGCCGAGGACATGCGTAGGCATATTCAAGCGCGGTATGCA 481  
Db 2149 GGGGTCGGCTGTGTGCGCCGAGGACCGCGTGGGCAATTATGGGGCGCGGTGTGCA 2208  
Qy 482 CCCGTGAGTGGCTTAAGCGGTGTGACCTTATCCCGTAGAGCTTTAGACACATGCA 541  
Db 2209 CCCGTGAGTGGCTTAAGCGGTGTGACCTTATCCCGTAGAGACCTTAGAGACACATGCA 2268  
Qy 542 GGTCCCGGGTGTCTCAGACCACTCTCCCAAGAGTGGCCCAAGCTCAACAAATG 601  
Db 2269 GGTCCCGGGTGTCTCAGAGTAACTCTCTCTCAGACAGTATGCCCCAGACTTCTCAGGTG 2328  
Qy 602 CCCACCTGTGATCTCCACCGGCAAGGCTAAGAGCAACCAAGTCCCGGCGCATAGCAG 661  
Db 2329 CTCACCTGTGATCTCCACAGGCAAGGCAAAAGCAACCAAGTCCCGGCTGATATGAG 2388  
Qy 662 CTCAGGGCTTAAGGTGTGTGTCTCAACCCCTCGGTGTGTGCAACAAATGAGCTTTGGTG 721  
Db 2389 CTCAGGGCTTAAGGTGTGTGTCTCAACCCCTCGGTGTGTGCAACAAATGAGCTTTGGTG 2448  
Qy 722 CTATACATGTCGAAGGCCCATGGGATTTGATCTTAACATCAAGGACTGGGGTGAAGCAATTA 781  
Db 2449 CTATACATGTCGAAGGCTCATGGGATTCGATCTTAACATCAAGGACTGGGGTGAAGCAATTA 2508  
Qy 782 CTATGAGGAGCCGATCAAGTATTCACCTTACGGCAAGTTCCTTGGCCGACGGCGGGTGT 841  
Db 2509 CCACTGGGAGCCCATACAGTACTCACTCAAGGCAAGTTCCTTGGCCGACGGCGGGTGTCT 2568  
Qy 842 CAGGGGGTGTCTTAATGACATTAATTTGTGACGAGTGCATCTCAACGATGCAATTCGA 901  
Db 2569 CAGGGGGTGTCTTAATGACATTAATTTGTGACGAGTGCATCTCAACGATGCAATTCGA 2628  
Qy 902 TCTTGGGCAATGGGCACTGTCTTGAACAGGACGAGGCGGGGGGAGACATGACTGTGTC 961  
Db 2629 TCTTGGGCAATGGGCACTGTCTTGAACAGGACGAGGCGGGGGGAGACATGACTGTGTC 2688  
Qy 962 TCGCACCGCTACCCCTCCGGGCTCGTGTACCTGTGACCTTAACTCAAGAGTGG 1021  
Db 2689 TCGCACCGGCAACCCCTCCGGGCTCGTGTACCTGTGACCTTAACTCAAGAGTGG 2748  
Qy 1022 CTCTGTCCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTCTTGAAGCAATTA 1081  
Db 2749 CTCTGTCCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTCTTGAAGCAATTA 2808  
Qy 1082 AGGGGGGGGAGACATCTCATCTTCTGCACTCAAGAGAGTGGGACGAGCTCGCGGCA 1141  
Db 2809 AGGGGGGGGAGACATCTCATCTTCTGCACTCAAGAGAGTGGGACGAGCTCGCGGCA 2868  
Qy 1142 AACTGTGCGCTGTGGGCGTCAATGCGTGTGCTTAATCAACCGGCTTGAATGTGTCCGTCA 1201

Db 2869 AGCTGTGCAATTTGGGACATCAATGCCGTGTGCTTACTACCGGCTTGAAGTGTCCGTCA 2928  
Qy 1202 TCCGACCAAGTGGTACGTTGTGCTGTGTGCAATGAGCCCTCAATGACGGCTTTACCG 1261  
Db 2929 TCCGACCAAGCGGCAATGTGTGTGTGTGCAAGGATGCTTCAATGACGGCTTTACCG 2988  
Qy 1262 GCGACTTGGATTCGGTGTATGACTGCAACACGTGTGTCAACCGACAGTGTGACTTCAAGCC 1321  
Db 2989 GCGACTTGGATTCGGTGTATGACTGCAATGAGTGTGTCAACCGACAGTGTGACTTCAAGCC 3048  
Qy 1322 TTGACCTTACCTTCAACATTTGACATCAAGCTTCCCAAGATGTGTCTTCCGTATCTC 1381  
Db 3049 TTGACCTTACCTTCAACATTTGACATCAAGCTTCCCAAGATGTGTCTTCCGTATCTC 3108  
Qy 1382 AACGTGGGGGTATGAGCTGGCAGAGGGAAGCCAGGATCTACGATTTTGGGACCGGGGG 1441  
Db 3109 AACGTGGGGGTATGAGCTGGCAGAGGGAAGCCAGGATCTACGATTTTGGGACCGGGGG 3168  
Qy 1442 AGCGTCTTCTTGGCAATGTTTGAATGTGTGCTGTGTGCTGTGAGAGTGTATGACGCGGGTGTG 1501  
Db 3169 AGCGCCCTCCGGCATGTTCGATCTGTCTGTGTGAGTGTATGACGCGAGCTGTG 3228  
Qy 1502 CTTGGTATGAGCTTACGCCCCCGGACCAAGTAAAGCTTACGAGCATATGAAACACC 1561  
Db 3229 CTTGGTATGAGCTTACGCCCCCGGACCAAGTAAAGCTTACGAGCATATGAAACACC 3288  
Qy 1562 CCGGACTTCCCGTGTGCGCAAGCACTTTGAATTTTGGAGGGCGCTTTAAGGGCTTCA 1621  
Db 3289 CCGGACTTCCCGTGTGCGCAAGCACTTTGAATTTTGGAGGGCGCTTTAAGGGCTTCA 3348  
Qy 1622 CCCACATAGACGCGCACTTCTTATCCAGACAAACAGAGTGGGGAACCTTCCCTATC 1681  
Db 3349 CTCATATGATATGCCACTTTTCTATCCAGACAAACAGAGTGGGGAACCTTCCCTATC 3408  
Qy 1682 TGGTAGCTTACCAAGCCACGCTGTGCTGAGCTCAAGCCCTTCCCGTGTGGAGCC 1741  
Db 3409 TGGTAGCTTACCAAGCCACGCTGTGCTGAGGCTCAAGCCCTTCCCGTGTGGAGCC 3468  
Qy 1742 AGATGTGAAGTGTGATTCGCTTCAAGGCCACCTCCATGGGGCAACCTGTGTAT 1801  
Db 3469 AGATGTGAAGTGTGATTCGCTTCAAGGCCACCTCCATGGGGCAACCTGTGTAT 3528  
Qy 1802 ATAGACTGGGCGCTTCTCAGAAATGAAGTCAACCTGACGACCCAGTCAACCAATATATCA 1861  
Db 3529 ATAGACTGGGCGCTTCTCAGAAATGAAGTCAACCTGACGACCCAGTCAACCAATATATCA 3588  
Qy 1862 TGACATGTATGTGCGCTGACTGAGAGTGTCTCAAGATCACTTGGTGTCTTGGCGGCG 1921  
Db 3589 TGACATGTATGTGCGCGCTGAGAGTGTCTCAAGATCACTTGGTGTCTTGGCGGCG 3648  
Qy 1922 TTTCTGGCTGTGGCCCGGCTATTTGCTTATCCACAGGCTGCGTGTCAATGATGATGAGA 1981  
Db 3649 TTTCTGGCTGTGGCCCGGCTATTTGCTTATCCACAGGCTGCGTGTCAATGATGATGAGA 3708  
Qy 1982 TTTCTGTGCGGGAAGCGGCAATCATACCCGACAGGGAATCTCTTACCGGAGTTGG 2041  
Db 3709 TGTCTTGTCCGGGAAGCGGCAATCATACCCGACAGGGAATCTCTTACCGAGTTCG 3768  
Qy 2042 ATGAATGGAAGTGTCT 2059  
Db 3769 ATGAATGGAAGTGTCT 3786

RESULT 7  
AAN90336  
ID AAN90336 standard; DNA; 7310 BP.  
XX AAN90336;  
AC 25-MAR-2003 (revised)  
DT 19-JUL-2001 (revised)  
DT 01-NOV-1989 (first entry)  
XX

DE Composite hepatitis C virus (HCV) cDNA.  
XX Hepatitis C virus; cDNA; clone 15e; clone k9-1; probe; vaccine; ds.  
XX Pan cytoglobins.  
OS GB212511-A.  
XX 26-JUL-1989.  
XX 18-NOV-1988; 88GB-00027024.  
XX PF 18-NOV-1987; 87US-00122714.  
XX PR 30-DEC-1987; 87US-00139866.  
XX PR 26-FEB-1988; 88US-00161072.  
XX PR 26-OCT-1988; 88US-00263584.  
XX PA (CHIR ) CHIRON CORP.  
XX PI Houghton M, Choo QL, Kuo G;  
XX WPI; 1989-215054/30.  
XX DR P-PSDB; AAP90288.  
XX Hepatitis C virus gene - used for prodn. of polynucleotide probes  
PT polypeptide(s) and antibodies for diagnosis, prevention and treatment of  
PI infection.  
XX Disclosure; Fig 47; 30pp; English.  
XX The sequence shows a composite hepatitis C virus (HCV) cDNA, derived by  
CC aligning clones k9-1 through 15e in 5'-3' direction. The cDNA encodes  
CC antigens which react with antibodies in patients with non-A non-B  
CC hepatitis (NANBH). The cDNA can be used to design probes, or to  
CC synthesize polypeptides, which are used to diagnose HCV-induced NANBH, to  
CC raise antibodies for immunosassay or treatment, or to produce vaccines.  
CC See also AAP90288, and AAN90303-35. (N.B. This record was resubmitted to  
CC correct errors in the sequence.) (Updated on 25-MAR-2003 to correct PR  
CC field.)  
XX  
SQ Sequence 7310 BP; 1495 A; 2218 C; 2058 G; 1539 T; 0 U; 0 Other;  
Query Match 86.7%; Score 1786; DB 1; Length 7310;  
Query Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;  
QY 2 TGCGCGCTATACGCGCTATGCGCAGACAGACAAAGGGGCTTTGGAGTGCATATACCA 61  
DB 1729 TGGCGGCCATCAAGGCGTACGCCAGCAGACAAAGGGGCTTCTAGGGTGCATATACCA 1788  
QY 62 GCTTGACCGGCGCGGACAAACCAAGTGAAGGTGAAGTTGAGTCCGTGCACTGCTG 121  
DB 1789 GCTTAACTGGCGCGGACAAACCAAGTGAAGGTGAAGTTGAGTCCGTGCACTGCTG 1848  
QY 122 CCCAGACTTTTGGCACTGCAATTAAGGGGTGTTGAGCTGCTACATGAGCCG 181  
DB 1849 CCCAAACTTCTGCGACGTGCAATTAAGGGGTGTTGAGCTGCTACATGAGCCG 1908  
QY 182 GAACAAGACATTTGGTCACTTAAGGCTCTGTTATCCAGATGTAACCAATGTTGACC 241  
DB 1909 GAACGAGACATTCGGTCACTTAAGGCTCTGTTATCCAGATGTAACCAATGTTGACC 1968  
QY 242 AAGACTCTGTAAGTGGCCCGCTCCCGAAGTCCCGCTCAATTAACCAATGTTGACC 301  
DB 1969 AAGACTCTGTAAGTGGCCCGCTCCCGAAGTCCCGCTCAATTAACCAATGTTGACC 2028  
QY 302 GCTCCCTCGACCTTTAAGTCAAGGACGCGGATGTCATCTGCTGCGCCGACGCG 361  
DB 2029 GCTCCCTCGACCTTTAAGTCAAGGACGCGGATGTCATCTGCTGCGCCGACGCG 2088  
QY 362 GTGATGGCAGGGGACAGCTGCTTTCGCCCGCGGCTATCTTAAAGGCTCCTCGG 421  
DB 2089 GTGATGGCAGGGGACAGCTGCTTTCGCCCGCGGCTATCTTAAAGGCTCCTCGG 2148

QY 422 GAGGCGCTGCTGNGGCCCGCAGAGATGCGGTAGGATATTGAGAGCCGCGGTATGCA 481  
DB 2149 GGGGTCGCGCTTTGTCGCCCCCGGAGCAGCGCTGAGGATTTTAAAGGCGCGGTGCA 2208  
QY 482 CCCGTGAGTGTAAAGCGGTGAGCTTTCATCCCGTGAAGGCTTAGAGCAACCATGA 541  
DB 2209 CCCGTGAGTGTAAAGCGGTGAGCTTTCATCCCGTGAAGGCTTAGAGCAACCATGA 2268  
QY 542 GGTCCCGGTGTTCTCAAGCAATCTCTCCCAACGAGTGGCCCGAAGCTACCAAGTGG 601  
DB 2269 GGTCCCGGTGTTCAAGCAATCTCTCCCAACGAGTGGCCCGAAGCTACCAAGTGG 2328  
QY 602 CCCACCTGATGCTCCCAAGCGGAGGTGAAGACCAAGGTCCCGGCGGATGCGAC 661  
DB 2329 CTACCTCAGTCTCCCAAGCGGAGGTGAAGACCAAGGTCCCGGCGGATGCGAC 2388  
QY 662 CTACAGGCTTAAGGTGCTGCTCAACCCCTCCGTTGCTGCAACAAATGGGCTTTGGTG 721  
DB 2389 CTACAGGCTTAAGGTGCTGCTCAACCCCTCCGTTGCTGCAACAAATGGGCTTTGGTG 2448  
QY 722 CTACATGTCGAAGGCCCATGGATGATCTTACATCAGACTGGGTGAGACAAATTA 781  
DB 2449 CTACATGTCGAAGGCCCATGGATGATCTTACATCAGACTGGGTGAGACAAATTA 2508  
QY 782 CTACTGGAGGCCGATCAAGTATTCACCTACGCGCAAGTCCCTGCGAGCGGGTGT 841  
DB 2509 CCACTGGAGGCCGATCAAGTATTCACCTACGCGCAAGTCCCTGCGAGCGGGTGT 2568  
QY 842 CAGGGGCTCTTATGACATTAATTTGTAAGAGTGCACCTCAAGATGACATCA 901  
DB 2569 CCGGGGCGCTTATGACATTAATTTGTAAGAGTGCACCTCAAGATGACATCA 2628  
QY 902 TCTTGGGATTTGGCACTGCTCTTGAACCAAGAGACCGCGGGCGGAGCTGATGCTGC 961  
DB 2629 TCTTGGGATTTGGCACTGCTCTTGAACCAAGAGACCGCGGGCGGAGCTGATGCTGC 2688  
QY 962 TCGGACCGCTACCCCTCGGGCTCGTCACTGTCGCCCATCTTAACATCGAGAGTTG 1021  
DB 2689 TCGGACCGCTACCCCTCGGGCTCGTCACTGTCGCCCATCTTAACATCGAGAGTTG 2748  
QY 1022 CTCTGTCCATCAACCGAGAGATCCCTTTTATGAGAGGCTATTCCTTTGAAGCAATTA 1081  
DB 2749 CTCTGTCCATCAACCGAGAGATCCCTTTTATGAGAGGCTATTCCTTTGAAGCAATTA 2808  
QY 1082 AGGGGGGAGACATCTTCTTTCGCACTCAAAAGAAAGTGCAGAGCTCGCGGCA 1141  
DB 2809 AGGGGGGAGACATCTTCTTTCGCACTCAAAAGAAAGTGCAGAGCTCGCGGCA 2868  
QY 1142 AACTGTGCGGTGGGCGTCAATGCGGTGCTTACACGCGGCTTGAATGTGCTCGTCA 1201  
DB 2869 AACTGTGCGGTGGGCGTCAATGCGGTGCTTACACGCGGCTTGAATGTGCTCGTCA 2928  
QY 1202 TCCCGACCAAGTGTGACCTGTGCTGTGCAATGACGCGCTCATGACGCGCTTTACG 1261  
DB 2929 TCCCGACCAAGTGTGACCTGTGCTGTGCAATGACGCGCTCATGACGCGCTTTACG 2988  
QY 1262 GCGACTTGGATTCCGTGATAGCTGCAACAGTGTGTCAACCAAGAGCTTCAAGCC 1321  
DB 2989 GCGACTTGGATTCCGTGATAGCTGCAACAGTGTGTCAACCAAGAGCTTCAAGCC 3048  
QY 1322 TTGACCTTACCTTCAATGAGCAATCAAGCTTCCCGAGATGCTGCTCCGTAATC 1381  
DB 3049 TTGACCTTACCTTCAATGAGCAATCAAGCTTCCCGAGATGCTGCTCCGTAATC 3108  
QY 1382 AACGTGCGGGTGAAGCTGGCAGAGGAAAGCAGGATCTACAGATTTGTGGACCGGGG 1441  
DB 3109 AACGTGCGGGTGAAGCTGGCAGAGGAAAGCAGGATCTACAGATTTGTGGACCGGGG 3168  
QY 1442 AGCGTCTTCTGGGATGTTTGAATGCTGCTGCTTTCGAGAGTCTAATACGGGGTGG 1501  
DB 3169 AGCGTCTTCTGGGATGTTTGAATGCTGCTGCTTTCGAGAGTCTAATACGGGGTGG 3228



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OY 1502 CTTGGTATGAGCTTACGCCCCGCGAGACCACTTATGAGCTACAGCATATGAAACACC 1561
DB 3229 CTTGGTATGAGCTACGCCCCGCGAGACCACTTATGAGCTACAGCATATGAAACACC 3288
OY 1552 CGGGACTTCGCGTGGCCAAAGCAATCTTGAATTTTGGAGGGCGCTTTTACGGGCTCA 1621
DB 3289 CGGGGCTTCGCGTGGCCAAAGCAATCTTGAATTTTGGAGGGCGCTTTTACGGGCTCA 3348
OY 1622 CCCACATGAGCGCCCACTTCCTATCCAGACAAAGAGGTGGGAAAACCTTCCCTATC 1681
DB 3349 CTCATATGAGTCCCACTTTCTATCCAGACAAAGAGGTGGGAAAACCTTCCCTATC 3408
OY 1682 TGGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGGTGTGGAACC 1741
DB 3469 TGGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGGTGTGGAACC 3468
OY 1742 AGATGTGGAAGTCTTGTATCGGTCTCAAGCCCACTTCAGGGGCCCAACACTGTCTAT 1801
DB 3469 AGATGTGGAAGTCTTGTATCGGTCTCAAGCCCACTTCAGGGGCCCAACACTGTCTAT 3528
OY 1802 ATAGA CTGGGCGCTGTCCAGATGGAAGTCAACCTGACGACCCAGTCAAGTATATCA 1861
DB 3529 ACAGACTGGCGCTGTCTGAGATGGAATCACTTGAACGACCCAGTCAAGTATATCA 3588
OY 1862 TGACATGATGTGCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTGCTGTGGCGGG 1921
DB 3589 TGACATGATGTGCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTGCTGTGGCGGG 3648
OY 1922 TTTGCGCTGCTTTGGCGCGGTAATTCCTATCCAGAGCTGCGTGTCAATGATGATGAGA 1981
DB 3649 TCTCGGCTGCTTTGGCGCGGTAATTCCTATCCAGAGCTGCGTGTCAATGATGATGAGA 3708
OY 1982 TTTGCTTTGCGCGGAAAGCGCGGAATCATACCCGACAGGGAATCCTCTTACGGGAGTTG 2041
DB 3709 TCGTCTTGTCCGCGGAAGCGCGGAATCATACCCGACAGGGAATCCTCTTACGGGAGTTG 3768
OY 2042 ATGAATGGAAGTGTCT 2059
DB 3769 ATGAGATGGAAGTGTCT 3786

RESULT 8
AAQ98221
ID AAQ98221 standard; cDNA to mRNA; 7310 BP.
XX
AC AAQ98221;
XX
DT 25-MAR-2003 (rev18ed)
DT 15-AUG-1996 (first entry)
XX
DE Hepatitis C virus clone genome.
XX
KW Hepatitis C virus; HCV; antigen; detection; diagnosis; vaccine;
KW antibodies; immunoprophylaxis; sera; serum; ds.
OS
XX Hepatitis C virus.
XX
PN US5443965-A.
XX
PD 22-AUG-1995.
XX
PF 05-APR-1991; 91US-00681703.
XX
PR 06-APR-1990; 90US-00505611.
XX 09-OCT-1990; 90US-00594854.
XX
PA (GENE-) GENELABS INC.
XX
PI Moeckli R, Reyes GR, Kim JP;
XX
DR WPI; 1995-302120/39.
XX
PT New nucleic acids encoding hepatitis C virus antigens - used to develop
```

```
PT prods. for detection of HCV-infected sera and prodn. of vaccines and anti
PT -HCV antibodies.
XX
PS Example 4; Fig 11; 71pp; English.
XX
CC Hepatitis C virus (HCV) antigens can be used for detecting HCV infected
CC sera and individuals infected with HCV. They can also be used in an anti-
CC HCV vaccine or for the production of anti-HCV antibodies which can be
CC used for passive immunoprophylaxis. The antigens consistently identify
CC more HCV positive serum samples with a high degree of specificity. See
CC AAQ98202-14 and AAR81939-51. (Updated on 25-MAR-2003 to correct PF
CC field.) (Updated on 25-MAR-2003 to correct PR field.)
XX
SQ Sequence 7310 BP; 1494 A; 2217 C; 2060 G; 1539 T; 0 U; 0 Other;

Query Match 86.7%; Score 1786; DB 2; Length 7310;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

OY 2 TGGGCGCTATCA CGGCTATGCGCCAGACAGACAAGGGGCGCTTTGGGATGATATACCA 61
DB 1729 TGGGCGCTATCA CGGCTATGCGCCAGACAGACAAGGGGCGCTTTAGGGTGCATATACCA 1788
OY 62 GCTTACCGGCGCGGACAAAACCAAGTGAAGGTGAAGTTCAATCGTCACTGCTG 121
DB 1789 GCTTACCGGCGCGGACAAAACCAAGTGAAGGTGAAGTTCAATCGTCACTGCTG 1848
OY 122 CCAGACCTTTCTTGGCAACCTGCAATTAACGGGGGTGTGTACTGTCAATGAGCCG 181
DB 1849 CCAGACCTTTCTTGGCAACCTGCAATTAACGGGGGTGTGTACTGTCAATGAGCCG 1908
OY 182 GAACAAGGACCATGCGTCACTAAGGGTCCGTATCCAGATGATCAACATGATGAGACC 241
DB 1909 GAACAAGGACCATGCGTCACTAAGGGTCCGTATCCAGATGATCAACATGATGAGACC 1968
OY 242 AAGACCTGTAGAGCTGAGCGCGCTCCCAAGGTGCCGCTCAATTAACCATGACCTTGG 301
DB 1969 AAGACCTGTAGAGCTGAGCGCGCTCCCAAGGTGCCGCTCAATTAACCATGACCTTGG 2028
OY 302 GCTCTCTGGACCTTTTACCTGTGTACAGAGGACCGCATGTCACTCTGTGGCCGACGG 361
DB 2029 GCTCTCTGGACCTTTTACCTGTGTGTACAGAGGACCGCATGTCACTCTGTGGCCGACGG 2088
OY 362 GTGATGAGAGGGGACCGCTTTCGCGCGGCTATCTTCACTTGAAGGCTCCTCGG 421
DB 2089 GTGATGAGAGGGGACCGCTTTCGCGCGGCTATCTTCACTTGAAGGCTCCTCGG 2148
OY 422 GAGGCCCTGTGCTGCCCCGAGACATGCGGTAGGATATTCAGAGCCGCGGTATGCA 481
DB 2149 GAGGCCCTGTGCTGCCCCGAGAGCAAGCGGTAGGATATTCAGAGCCGCGGTATGCA 2208
OY 482 CCGGTGAGTGGCTTAAGGCGGTGAATTCATCCCGGTAGAGCTTTAGAGACCAATCA 541
DB 2209 CCGGTGAGTGGCTTAAGGCGGTGAATTCATCCCGGTAGAGCTTTAGAGACCAATCA 2268
OY 542 GGTCCCGGTGTTCACAGCAATCTCTCCACAGAGAGTGGCCGAGAGCTTACCAAGTGG 601
DB 2269 GGTCCCGGTGTTCACAGCAATCTCTCTCCACAGAGAGTGGCCGAGAGCTTACCAAGTGG 2328
OY 602 CCCACCTGATGCTCCACCGGACGAGTGAAGAGCAAGAGTCCCGGCGGATACGAG 661
DB 2329 CTCACCTCAGTCTCCACAGGACGAGCAAAAGACCAAGGTCCCGGCTGATATGAG 2388
OY 662 CTCAGGCTCAAGGTGCTGTCTCAACCCCTCGTGTGCTGCAACATAGGCGTTTGGTG 721
DB 2389 CTCAGGCTCAAGGTGCTGTCTCAACCCCTCGTGTGCTGCAACATAGGCGTTTGGTG 2448
OY 722 CTTAATGTCAGAGGCCATGAGATTGATTCCTAATCAGAGCTGGGGTGAAGCAATTA 781
DB 2449 CTTAATGTCAGAGGCCATGAGATTGATTCCTAATCAGAGCTGGGGTGAAGCAATTA 2508
OY 782 CTAAGTGGAGCCGATCACTATTCACCTTACGAGAGTTCCTTGCAGCGCGGGTGT 841
```



Query Match	86.7%	Score 1786:	DB 3:	Length 8316:
Best Local Similarity	91.7%	Pred. No. 0:		
Matches 1888:	Conservative	0:	Mismatches 170:	Indels 0:
			Gaps	0:
QY	2	TGAGCGCCATACCGGCCTATGATCCCAAGCAGACAAAGGGGCGCTTTTGGGATGATCAATACCA	61	
Db	2735	TGGGGCCCATACCGCCGTACGCCCCAGCAGACAAAGGGGCGCTCTAGGGTGGCATTAATACCA	2794	
QY	62	GCTTGACCGGCGGAGCAAAAAACGAGGTGAGGGGTGAGGTTCAATCGTGTCAACTGCTG	121	
Db	2795	GCCTAACGTGGCGGGGACAAAAACCAAGTGAGGGGTGAGGTCCAGATTGTGTCAACTGCTG	2854	
QY	122	CCCAAGCTTTTCTTGCGCAACCTGCAATTAACGGGGTGTGTGACATGTCTTAACATGAGGCG	181	
Db	2855	CCCAAACTTCTCTGCGCAACGTGCAATTAAGGGGTGTGTGACATGTCTTAACACGGGGCGG	2914	
QY	182	GAACAAAGAACCATTCGTCACCTTAAGGGTCCGTATATCAGATGACCAATGTGAGAC	241	
Db	2915	GAACGAGGACCATCGCGTCACCCCAAGGGTCTGTGTATCAAGTGTATACCAATGTAGAC	2974	
QY	242	AAAGACTTGTAAGCTGAGCCGCTCCCAAGGTGCCCCGTCAATTAACACATGACCTTGC	301	
Db	2975	AAAGACTTGTGAGGCTGAGCCGCGCTCGGCAAGGTAGCGCTCAATGACACCTGTGACTTGC	303	
QY	302	GCTCCTCGGACCTTTAATCTGTGACAGAGCACGCGGATGTCTTCTGTGGCGGACGG	361	
Db	3035	GCTCCTCGGACCTTTAATCTGTGACAGAGCACGCGGATGTCTTCTGTGGCGGCGGG	3094	
QY	362	GTGATGAGCAGGGGAGCGCTGTGAGCCCGGCGCATCTTAACTTGAAGAGGCTCTGCG	421	
Db	3095	GTGATGAGCAGGGGAGCGCTGTGAGCCCGGCGCATCTTAACTTGAAGAGGCTCTGCG	315	
QY	422	GAGGCGCTCTGCTGTGCCCGCAGAGCAATGCGGTAGGATTAATGAGCGCGGTATGCA	481	
Db	3155	GAGGCGCTCTGTGTGTGCCCGGAGGAGCACGCGGTGGCATATTTAAGGCGCGGTGTGCA	3214	
QY	482	CCCGTGAAGTGGCTTAAGCGGCTGACCTTCACTCCCGTGAAGAGCTTGAAGAACATGAG	541	
Db	3215	CCCGTGAAGTGGCTTAAGCGGCTGACCTTATCTCTGTGAGAGCACTTAAGAACATGAG	3274	
QY	542	GGTCCCGGATTTCTACAACTCTCTCCCAACGAGAGTCCCGAGGCTAACCAAGTGG	601	
Db	3275	GGTCCCGGATTTCTACGGAATTACTCTCTCCACAGATAGTGGCCCGAGGCTTAAGGTTGG	3334	
QY	602	CCCACTTGATGCTCTCCACCGGAGCGGTAAAGAGCACCAAGTCCCGGCGCATATGAG	661	
Db	3335	CTCACCTTCAGTCTCCACAGGAGCGGCAAAAGACCAAGTCCCGGCTGATATGAG	3394	
QY	662	CTCAGGGCTAACAGGTGTGTGCTCAACCCCTCCGTTCGTGCAAAATGAGCTTTGGTG	721	
Db	3395	CTCAGGGCTTAAGGTGTGATGACTCAACCCCTCTGTGTGCAACAATGAGCTTTGGTG	3454	
QY	722	CTTACATGTTCCAAAGGCCATAGGATTTGATCTTAACATAGAGACTGGGGTGAAGCAATTA	781	
Db	3455	CTTACATGTTCCAAAGGCTCATAGGATTCGATCTTAACATAGAGACCGGGGTGAGAAATTA	3514	
QY	782	CTAATGAGAGCCGATTCAGATTTCACTTAACGAGCAAGTCTTTGACGAGCGGGGTGT	841	
Db	3515	CCAATGAGAGCCCATTCAGATTCCTCACTAGGCAAGTCTTTGACGAGCGGGGTGTCT	3574	
QY	842	CAGGGGAGCTTATGACATTAATTTGTGAGAGTGCCTCCACGGATGCAATATCA	901	
Db	3575	CAGGGGAGCTTATGACATTAATTTGTGAGAGTGCCTCCACGGATGCAATATCA	3634	
QY	902	TCTTTGGGATTTGGCATGTCTCTTGAACAAAGCAGAACCGCGGGGCGAGACTGTGTC	961	
Db	3635	TCTTTGGGATTTGGCATGTCTCTTGAACAAAGCAGAACCTGGGGCGAGACTGTGTGTC	3694	
QY	962	TGCGCAACGGTACCCCTCGGGGCTCGTCACTGTGCCCATTCCTAACTGAGAGGTTG	1021	
Db	3695	TGCGCAACGGCACCCCTCGGGGCTCGTCACTGTGCCCATTCCTAACTGAGAGGTTG	3755	
QY	1022	CTCTGTCCACTACCGGAGAGATCCCTTTTATGAGCAAGCTAATTCCTTGAAGCAATTA	1081	

Db	3755	CTCTGTCCACCACCGGAGAGATCCCTTTTACGGCAAGGCTATCCCTCTGAAATATCA	3814
Qy	1082	AGGGGGGGGAGACATCTCATCTTTCGCCATCCAAAGAAAGTGGACGAGCTGCGCGCA	1141
Db	3815	AGGGGGGGGAGACATCTCATCTTTCGTCATTCAAAGAAAGTGGACGAACTCCCGCA	3874
Qy	1142	AACGTGTGCGCTTGGGGGTCAATGCGGTGGCTTACTACCGGCGCTTGATGTGCGCTCA	1201
Db	3875	AGCTGTGTGCAATTTGGGCAATCAATCCGTGGCGTACTACCGCGGCTTGACGTGTGCGCTCA	3934
Qy	1202	TCCGACCAAGGATGAGCGTTGTGCTGCTGGCAATCGACGCCCTCATACCGGGCTTTACCG	1261
Db	3935	TCCGACCAAGGAGGAGATGTTGTGCTGCTGGCAACCGATGCCCTCATATGACGGCTATACCG	3994
Qy	1262	GCGACTTCGATTCGGTGTATGACTGCAACAGTGTGTACCCAGACAGTGCATTCAGCC	1321
Db	3995	GCGACTTCGATTCGGTGTATGACTGCAATAGTGTGTACCCAGACAGTGTATTCAGCC	4054
Qy	1322	TTGACCCCTACCTTCAACCATTTGAGCAATCAAGCTTCCCAGAGATGCTGTCTCCGTA	1381
Db	4055	TTGACCCCTACCTTCAACCATTTGAGCAATCAAGCTTCCCAGAGATGCTGTCTCCGTA	4114
Qy	1382	AACGTGGGGGTGAGGACTGGGCAAGGAGGAGGAGGATCTACAGATTTGTGGCACCGGGGG	1441
Db	4115	AACGTGGGGGTGAGGACTGGGCAAGGAGGAGGAGGATCTACAGATTTGTGGCACCGGGGG	4174
Qy	1442	AGCGTCCCTTCTGGGATGTTGACTCGTGTGCTCTCGGAGTGTCTATGACGCGGGTTGTG	1501
Db	4175	AGCGCGCTTCCGGGATGTTGACTCGTGTGCTCTCGGAGTGTCTATGACGCGGGTTGTG	4234
Qy	1502	CTTGGTATGAGCTTACCGCGCGCGGACCAACGTTAGGCTTACGACATCATGAAACCC	1561
Db	4235	CTTGGTATGAGCTTACCGCGCGCGGACCAACGTTAGGCTTACGACGCTACATGAAACCC	4294
Qy	1562	CGGGAATTCCTCCGTGTGCGCAAGACATCTGAAATTTGGAGGGGCTTTACGGGTCTCA	1621
Db	4295	CGGGAATTCCTCCGTGTGCGCAAGACATCTGAAATTTGGAGGGGCTTTACGGGTCTCA	4354
Qy	1622	CCCAATATGACGCGCACTTCTCTATCCGACAAAGACAGAGTGGGAGAAACCTTCCCTATC	1681
Db	4355	CTCATATATGATGCCCATCTTCTATCCGACAAAGACAGAGTGGGAGAAACCTTCCCTATC	4414
Qy	1682	TGATAGCGTACCAAGCCACGCTGTGGCTAGAGCTCAAGCCCTCTCCCGCTGTGGAGC	1741
Db	4415	TGATAGCGTACCAAGCCACGCTGTGGCTAGAGCTCAAGCCCTCTCCCGCTGTGGAGC	4474
Qy	1742	AGATGTGGAATGCTTGTATCCGTCTCAAGCCACCTCTCATGGGCCCAACACTTTCGTAT	1801
Db	4475	AGATGTGGAATGCTTGTATTCGCTCTCAAGCCACCTCTCATGGGCCCAACACTTTCGTAT	4534
Qy	1802	ATTAGACTGGGGGCTGTGCGAAGATGAAGTCAACCTGACGCAACCAAGTCAACCAAGTATATCA	1861
Db	4535	ACAGACTGGGGGCTGTGCTCAAGATATAATCAACCTGACGCAACCAAGTCAACCAAGTATATCA	4594
Qy	1862	TGACATGATGTCCGCTGACCTGAGAGTGTCTACAGATACCTTGAGTGTCTGTTGGCGCG	1921
Db	4595	TGACATGATGTCCGCGCGACCTGAGAGTGTCTACAGAGTGTCTGTTGGCGCG	4654
Qy	1922	TTCTGGCTGCTTTGGCGCGCTATTGCTATTCACAGGCTGTGTGTCTATATAGTATGAGA	1981
Db	4655	TCTCGGCTGCTTTGGCGCGCTATTGCTATTCACAGGCTGTGTGTCTATATAGTATGAGA	4714
Qy	1982	TTGTCTTGTCCGGAAGCGGCAATCATCCGACAGGAGAAATCTCTCAACGGAGTTGC	2041
Db	4715	TGTCTTGTGTCCGGAAGCGGCAATCATCTGACAGGAGATCTCTTACCGAGATTTGC	4774
Qy	2042	ATGAATATGAAGATGCT 2059	
Db	4775	ATGAGATGAAGATGCT 4792	

AAZ07656  
ID AAZ07656 standard; DNA; 9133 BP.  
XX  
AC AAZ07656;  
XX  
DT 20-MAR-2003 (revised)  
DT 08-NOV-1999 (first entry)  
XX  
DE Nucleotide sequence of HCV-1 ORF.  
XX  
KM Hepatitis C virus; HCV; J1; J7; HCV-1; non-A, non-B HCV; NANBH;  
KM HCV infection; vaccine; ds.  
XX  
OS Hepatitis C virus.  
XX  
FH Key Location/Qualifiers  
FT CDS 268..9132  
FT /tag=b  
FT /transl\_except= (pos:1588..1589; aa:Leu)  
FT /note= "this codon has an apparent 1 nucleotide deletion,  
FT which alters the reading frame"  
FT /transl\_except= (pos:1647..1650; aa:Pro)  
FT /note= "this codon has an apparent 1 nucleotide  
FT insertion, which alters the reading frame; this insertion  
FT is not indicated in the sequence present in the formal  
FT sequence listing of the specification"  
XX  
PM EP939128-A2.  
XX  
PD 01-SEP-1999.  
XX  
PF 17-SEP-1990; 99EP-00101746.  
XX  
PR 15-SEP-1989; 89US-00408045.  
PR 21-DEC-1989; 89US-00456142.  
PR 17-SEP-1990; 90EP-00310149.  
XX  
PA (OVAA/) OVA A.  
PA (CHTR) CHIRON CORP.  
XX  
PI Miyamura T, Saito I, Houghton M, Weiner AJ, Han J, Kolberg JA;  
PI Cha T, Irvine BD;  
XX  
DR WPI: 1999-480843/41.  
DR P-PSDB; AAY14975.  
XX  
PT New Hepatitis C virus isolates, useful for diagnosis of hepatitis  
PT infections and development of vaccines.  
XX  
PS Disclosure; Fig 12; 132pp; English.  
XX  
CC The invention provides two new isolates of hepatitis C virus (HCV), J1  
CC and J7. These two isolates comprise nucleotide and amino acid sequences  
CC that are distinct from the HCV isolate HCV-1. The nucleotide sequences  
CC may be used to detect non-A, non-B HCV (NANBH) polynucleotides by  
CC hybridization for diagnosis of NANBH infections. They may also be used to  
CC screen blood donors, donated blood and blood products for this infection.  
CC The isolates may also be used to isolate other naturally occurring  
CC variants of the virus. The polypeptides may be used as a vaccine for  
CC administration to patients to protect against infection with NANBH. The  
CC present sequence represents the nucleotide sequence of HCV-1 ORF.  
CC (Updated on 20-MAR-2003 to correct PF field.) (Updated on 20-MAR-2003 to  
CC correct PR field.)  
XX  
SQ Sequence 9133 BP; 1834 A; 2772 C; 2600 G; 1927 T; 0 U; 0 Other;  
Query Match 86.7%; Score 1786; DB 2; Length 9133;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;  
QY 2 TGGCGCTATCAACGCGCTATGCCAGACAGACAAAGGGGCTTTGGAGCATATACCA 61  
DB TGGCGCTATCAACGCGCTATGCCAGACAGACAAAGGGGCTTTGGAGCATATACCA 3403

QY 62 GCTTGAACGGCCGGGACAAAAACAGGTGAGGGGTTCAGATCGTCAACTGCTG 121  
DB GCTTGAACGGCCGGGACAAAAACAGGTGAGGGGTTCAGATCGTCAACTGCTG 3463  
QY 122 CCAGACTTTCTTGGCAACTGCAATTAACGGGTGTGGACTGTCAATCAATGAGCCG 181  
DB CCAGACTTTCTTGGCAACTGCAATTAATGAGGTGTGCTGACTGTCAACGAGGGCCG 3523  
QY 182 GAACAAAGACATTCCTGCACTTAAGGGTCTGTATCAAGATGACCAATGAGACC 241  
DB GAACAAAGACATTCCTGCACTTAAGGGTCTGTATCAAGATGATCAATGATGAGACC 3583  
QY 242 AAGACCTGTAGGCTGAGCCGCTCCCAAGGTGCGCTCAATTAACCAATGACTTGGC 301  
DB AAGACCTGTAGGCTGAGCCGCTCCCAAGGTGCGCTCAATTAACCAATGACTTGGC 3643  
QY 302 GCTCTCGGACCTTTTAACTGCTACAGAGCAACCGGATGTCTTGTGCGCGAGCGG 361  
DB GCTCTCGGACCTTTTAACTGCTACAGAGCAACCGGATGTCTTGTGCGCGAGCGG 3703  
QY 362 GTGATGAGAGGGGCAAGCTGTCTTGTGCGCGGCTATCTTAACTTGAAGGCTCTCGG 421  
DB GTGATGAGAGGGGCAAGCTGTCTGTCGCCCGGCTATCTTAACTTGAAGGCTCTCGG 3763  
QY 422 GAGGCGCTCTGCTGTGCGCGGAGACATGCGGTAGGCAATTCAGAGCGCGGTATGCA 481  
DB GAGGCGCTCTGCTGTGCGCGGAGACATGCGGTAGGCAATTCAGAGCGCGGTATGCA 3823  
QY 482 CCGGTGAGGTGCTAAGGCGGTGACCTTATCCCGTGAAGAGCTTGAAGACCAACATGA 541  
DB CCGGTGAGGTGCTAAGGCGGTGACCTTATCCCGTGAAGAGCTTGAAGACCAACATGA 3883  
QY 3824 CCGGTGAGGTGCTAAGGCGGTGACCTTATCCCGTGAAGAGCTTGAAGACCAACATGA 3883  
QY 542 GGTCCCGGTGTCTTCAACAACTCTCCCAACGAGATGCCCAAGCTACCAAGTGG 601  
DB GGTCCCGGTGTCTTCAACAACTCTCTCCCAACGAGATGTGCCCAAGCTTCCAGTGG 3943  
QY 3884 GGTCCCGGTGTCTTCAACAACTCTCTCCCAACGAGATGTGCCCAAGCTTCCAGTGG 3943  
QY 602 CCCACTGATGCTCCCAACGAGATGTGCCCAACGAGATGTGCCCAAGCTTCCAGTGG 661  
DB CCCACTGATGCTCCCAACGAGATGTGCCCAACGAGATGTGCCCAAGCTTCCAGTGG 4003  
QY 3944 CTCACCTTCATGCTTCCCAACGAGATGTGCCCAACGAGATGTGCCCAAGCTTCCAGTGG 4003  
QY 662 CTCAGGGGTATCAAGGTGTGTGCTCAACCCCTCGGTGTGCTCAACATGAGGCTTGGTG 721  
DB CTCAGGGGTATCAAGGTGTGTGCTCAACCCCTCGGTGTGCTCAACATGAGGCTTGGTG 4063  
QY 722 CTTAATGATCCAAAGGCTCATGAGATTTGATCTTAATCAGACATGAGGCTGAGCAATTA 781  
DB CTTAATGATCCAAAGGCTCATGAGATTTGATCTTAATCAGACATGAGGCTGAGCAATTA 4123  
QY 4064 CTTAATGATCCAAAGGCTCATGAGATTTGATCTTAATCAGACATGAGGCTGAGCAATTA 4123  
QY 782 CTTAATGATCCAAAGGCTCATGAGATTTGATCTTAATCAGACATGAGGCTGAGCAATTA 841  
DB CTTAATGATCCAAAGGCTCATGAGATTTGATCTTAATCAGACATGAGGCTGAGCAATTA 4183  
QY 4124 CCACTGAGAGCCCACTACGATCTCACTACGAGCAAGTCTTCCGACAGCGGGGTGT 4183  
QY 842 CAGGGGCTGTTATGACATTAATTTGATGAGATGCGCACTCAAGATGCAATCA 901  
DB CAGGGGCTGTTATGACATTAATTTGATGAGATGCGCACTCAAGATGCAATCA 4243  
QY 4184 CAGGGGCTGTTATGACATTAATTTGATGAGATGCGCACTCAAGATGCAATCA 4243  
QY 902 TCTTGGGATTTGAGCACTGTCTTGAACAGAGACCGCGGGGCGAGACTGATGTGC 961  
DB TCTTGGGATTTGAGCACTGTCTTGAACAGAGACCGCGGGGCGAGACTGATGTGC 4303  
QY 4244 TCTTGGGATTTGAGCACTGTCTTGAACAGAGACCGCGGGGCGAGACTGATGTGC 4303  
QY 962 TCGCAGCGCTAACCCTCGGGCTCGTCACTGTGCCCATCTTAACATGAGAGGTTG 1021  
DB TCGCAGCGCTAACCCTCGGGCTCGTCACTGTGCCCATCTTAACATGAGAGGTTG 4363  
QY 4304 TGGCCACCGCACCCCTCGGGCTCGTCACTGTGCCCATCTTAACATGAGAGGTTG 4363  
QY 1022 CTCTGTCCACTACCGGAGAGATCCCTTTATGAGAGGCTATTCCTTGAAGCAATTA 1081  
DB CTCTGTCCACTACCGGAGAGATCCCTTTATGAGAGGCTATTCCTTGAAGCAATTA 4423  
QY 4364 CTCTGTCCACTACCGGAGAGATCCCTTTATGAGAGGCTATTCCTTGAAGCAATTA 4423  
QY 1082 AGGGGGGAGACATTTCTTCTTGGCACTGAAGAGAGGCGACGCTGCGCGCA 1141  
DB AGGGGGGAGACATTTCTTCTTGGCACTGAAGAGAGGCGACGCTGCGCGCA 4483  
QY 4424 AGGGGGGAGACATTTCTTCTTGGCACTGAAGAGAGGCGACGCTGCGCGCA 4483

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QY 1142 AACTGTCGCGTGGGCGCTCAATGCGTGGCTTAACCGCGGCGCTTGATGTCCTCA 1201
DB 4484 AGCTGTGGCATTTGGGCAATCAATGCGTGGCTTAACCGCGGCTTGATGTCCTCA 4543
QY 1202 TCCCGACAGTGGTGAAGTGTGTCGTGGCAATGACGCGCTCATGACGCGCTTACCG 1261
DB 4544 TCCCGACAGCGCGGCGATGTTGTGTCGTGGCAACGATCCCTCATGACGCGCTATACCG 4603
QY 1262 GCGACTTGATTCGGGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 1321
DB 4604 GCGACTTGATTCGGGTGATGATGATGATGATGATGATGATGATGATGATGATGAT 4663
QY 1322 TTGACCCCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTT 1381
DB 4664 TTGACCCCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTT 4723
QY 1382 AACGTCGGGGTGAAGACTGGCAGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1441
DB 4724 AACGTCGGGGTGAAGACTGGCAGAGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4783
QY 1442 AGCGTCCTTCTGCGATGTTGATCTGCTCTGCTCTGCTCTGCTCTGCTCTGCTCTG 1501
DB 4784 AGCGTCCTTCTGCGATGTTGATCTGCTCTGCTCTGCTCTGCTCTGCTCTGCTCTG 4843
QY 1502 CTTGGTATGAGCTTACGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1561
DB 4844 CTTGGTATGAGCTTACGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 4903
QY 1562 CGGGAATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1621
DB 4904 CGGGAATTCCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 4963
QY 1622 CCCAATAGAGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1681
DB 4964 CCCAATAGAGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5023
QY 1682 TGGTACGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1741
DB 5024 TGGTACGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5083
QY 1742 AGATGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1801
DB 5084 AGATGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5143
QY 1802 ATAGAGTCGGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1861
DB 5144 ATAGAGTCGGCGCGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 5203
QY 1862 TGAATGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1921
DB 5204 TGAATGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5263
QY 1922 TTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 1981
DB 5264 TTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 5323
QY 1982 TTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 2041
DB 5324 TTGCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 5383
QY 2042 ATGAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 2099
DB 5384 ATGAATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 5401
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RESULT 11

AAQ10566

ID AAQ10566 standard; DNA; 9185 BP.

XX AAQ10566;

AC 25-MAR-2003 (revised)

DT 29-APR-1991 (first entry)

DB

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XX Hepatitis C virus strain 1 DNA.
DE
XX Hepatitis C virus; HCV-1; non-A, non-B hepatitis; HCV antigen;
KM viral infections; 89.
XX
OS Hepatitis C virus.
XX
PN EP414475-A.
XX
PD 27-FEB-1991.
XX
PF 21-AUG-1990; 90BP-00309120.
XX
PR 25-AUG-1989; 89US-00398667.
XX
PA (CHIR ) CHIRON CORP.
PI Weiner AJ, Steimer KS;
XX
DR WPI; 1991-059670/09.
XX
PT Cell lines infected with hepatitis C virus - are used as source of
PT antigens for detection of HCV antibodies, for vaccines, and for screening
PT anti-viral agents.
XX
PS Disclosure; Fig 1; 24pp; English.
XX
CC This is a hepatitis C virus (HCV) composite cDNA sequence, deduced using
CC overlapping clones, a compm. contg. the antigenic protein encoded by
CC this sequence is useful for detecting anti-HCV anti- bodies (Abs) and for
CC screening an agent which inhibits HCV replic- action. A cell line infected
CC with this virus can be used as a source of antigens. The antigen is
CC useful for preparing vaccines for treating viral infections. See also
CC AAQ10567. (Updated on 25-MAR-2003 to correct PA field.)
XX
SQ Sequence 9185 BP; 1849 A; 2790 C; 2608 G; 1938 T; 0 U; 0 Other;
Query Match 86.7%; Score 1786; DB 2; Length 9185;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;
QY 2 TGGCCCTATCAGCGGCTATGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 61
DB 3396 TGGCCCTATCAGCGGCTATGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3455
QY 62 GCTTACCGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 121
DB 3456 GCTTACCGGCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3515
QY 122 CCCAATCTTCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 181
DB 3516 CCCAATCTTCTGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3575
QY 182 GAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 241
DB 3576 GAAAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3635
QY 242 AAGACTGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 301
DB 3636 AAGACTGTCAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3695
QY 302 GCTCTCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 361
DB 3696 GCTCTCGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3755
QY 362 GTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 421
DB 3756 GTGATGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3815
QY 422 GAGGCCCTCTGCTGTCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 481
DB 3816 GAGGCCCTCTGCTGTCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 3875
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QY 482 CCGGAGTGGCTAAGGCGGTGATTCATCCCGTAGAGCTTAAAGACAACATCA 541  
 Db 3876 CCGGAGTGGCTAAGGCGGTGATTCATCCCGTAGAGCTTAAAGACAACATCA 3935  
 QY 542 GGTCCCGGTGTTCTCAGACAACCTCTCCCAACAGAGTGGCCGAGACTCAAGTGG 601  
 Db 3936 GGTCCCGGTGTTCTCAGACAACCTCTCCCAACAGAGTGGCCGAGACTCAAGTGG 3995  
 QY 602 CCCACTGATATCTCCACCGGAGGTTAAGACACAAAGTCCCGGCGCATACGAG 661  
 Db 3996 CTCACCTCATGTCTCCACAGGAGGCGGAAAGACCAAGGTCCCGGCTGATATGCG 4055  
 QY 662 CTCAGGGCTAAGAGTGTGTCTCAACCCCTCCGTTCTGCAACAATAGGCTTTGGT 721  
 Db 4056 CTCAGGGCTAAGAGTGTGTCTCAACCCCTCCGTTCTGCAACAATAGGCTTTGGT 4115  
 QY 722 CTTAAGTGTCAAGGCGCATGGAGTTGATCTTAACATCAGAGCTGGGGTGAAGACAATTA 781  
 Db 4116 CTTAAGTGTCAAGGCGCATGGAGTTGATCTTAACATCAGAGCTGGGGTGAAGACAATTA 4175  
 QY 782 CTACTGAGAGCCCGATCAAGTATTCACCTACGCAAGTTCTTGGCCAGCGGTGT 841  
 Db 4176 CCACGTGGAGCCCGCATCAGCTACCTACGCAAGTTCTTGGCCAGCGGTGTCT 4235  
 QY 842 CAGGGGGTCTTATGACATATATTTGTGACAGAGTGGCACTCAAGGATGCAATCCA 901  
 Db 4236 CAGGGGGTCTTATGACATATATTTGTGACAGAGTGGCACTCAAGGATGCAATCCA 4295  
 QY 902 TCTTGGGCAATTGGACCTGTCTTGGACAGAGAGACCGGGGGGCGAGACTGACTGTC 961  
 Db 4296 TCTTGGGCAATTGGACCTGTCTTGGACAGAGAGACCGGGGGGCGAGACTGACTGTC 4355  
 QY 962 TGGCCACCGCTACCCCTCCGGGTCTCGGTACATGTGCCCATCTTAACATCGAGAGTGG 1021  
 Db 4356 TGGCCACCGCTACCCCTCCGGGTCTCGGTACATGTGCCCATCTTAACATCGAGAGTGG 4415  
 QY 1022 CTCTGCTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTCTGAAGCAATTA 1081  
 Db 4416 CTCTGCTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTCTGAAGCAATTA 4475  
 QY 1082 AGGGGGGAGAGATCTCATCTTCTGCACTCAAGAGAGAGTGGAGAGTCTGGCGCA 1141  
 Db 4476 AGGGGGGAGAGATCTCATCTTCTGCACTCAAGAGAGAGTGGAGAGTCTGGCGCA 4535  
 QY 1142 AACTGTGCGGTGGGCGGTCAATGCCGTGGCTTAACTACCGCGCTTGAATGTCTCCGTCA 1201  
 Db 4536 AACTGTGCGGTGGGCGGTCAATGCCGTGGCTTAACTACCGCGCTTGAATGTCTCCGTCA 4595  
 QY 1202 TCCCGACAGTGTGACGTTGTCTGTGTGGCAACTGACGCGCTCATGACCGGCTTACCG 1261  
 Db 4596 TCCCGACAGTGTGACGTTGTCTGTGTGGCAACTGACGCGCTCATGACCGGCTTACCG 4655  
 QY 1262 GCGACTTGTGATTCGTGTATGACTGCAACAGTGTGTCAACGAGAGTGTGACTTCAAGCC 1321  
 Db 4656 GCGACTTGTGATTCGTGTATGACTGCAACAGTGTGTCAACGAGAGTGTGACTTCAAGCC 4715  
 QY 1322 TTGAACCTTACCTTACCAATTTGAGACAATACGCTTCCCAAGATGTGTCTCCGTAATC 1381  
 Db 4716 TTGAACCTTACCTTACCAATTTGAGACAATACGCTTCCCAAGATGTGTCTCCGTAATC 4775  
 QY 1382 AACGTGGGGTATGAGACTGGCAGAGGAGACGAGCATCTTAAGATTGTGGACCGGGGG 1441  
 Db 4776 AACGTGGGGTATGAGACTGGCAGAGGAGAGACGAGCATCTTAAGATTGTGGACCGGGGG 4835  
 QY 1442 AGCGTCTTCTGTGAGATTTGACTGTCTGTCTGTGAGAGTGTGTAAGACGCGGTGTGG 1501  
 Db 4836 AGCGTCTTCTGTGAGATTTGACTGTCTGTCTGTGAGAGTGTGTAAGACGCGGTGTGG 4895  
 QY 1502 CTTGGTATAGCTTAAGCGCCCGCGAGACCAAGTTAGGCTTGAAGCATTAAGAACCC 1561  
 Db 4896 CTTGGTATAGCTTAAGCGCCCGCGAGACCAAGTTAGGCTTGAAGCATTAAGAACCC 4955

QY 1562 CCGGACTCTCCGTGTGCCAAGACCATCTTGAATTTTGGAGGGCGTCTTACAGGCTTCA 1621  
 Db 4956 CCGGACTCTCCGTGTGCCAAGACCATCTTGAATTTTGGAGGGCGTCTTACAGGCTTCA 5015  
 QY 1622 CCCACATAGACGCCCATCTTCTATCCAGACAAAGCAGAGTGGGAAAACTTCCCTATC 1681  
 Db 5016 CTCATATAGATGCCCATCTTCTATCCAGACAAAGCAGAGTGGGAAAACTTCCCTATC 5075  
 QY 1682 TGGTAGCGCTTACCAAGCCACCGTGTGGCTAGAGCTCAAGCCCTCCCGGTGGTGGAGCC 1741  
 Db 5076 TGGTAGCGCTTACCAAGCCACCGTGTGGCTAGAGCTCAAGCCCTCCCGGTGGTGGAGCC 5135  
 QY 1742 AGATGTGAAGTGTGTGATTCGTTCAAGCCCATCTCATAGGCGCAACCTCTGTAT 1801  
 Db 5136 AGATGTGAAGTGTGTGATTCGTTCAAGCCCATCTCATAGGCGCAACCTCTGTAT 5195  
 QY 1802 ATGACTGGGCGCTGTCCAGAAATGAATGACCTTGAACGCACTCACTCAAGATATTA 1861  
 Db 5196 ATGACTGGGCGCTGTCCAGAAATGAATGACCTTGAACGCACTCACTCAAGATATTA 5255  
 QY 1862 TGACATGATGTGGCTGACCTGAGAGTGTGTGAGAGTACCTGGGTGCTTGGCGGCG 1921  
 Db 5256 TGACATGATGTGGCTGACCTGAGAGTGTGTGAGAGTACCTGGGTGCTTGGCGGCG 5315  
 QY 1922 TTCTGCTGCTTTTGGCGCGATTTGCTATCCACAGGCTGCTGTGATAGTAGAGGA 1981  
 Db 5316 TTCTGCTGCTTTTGGCGCGATTTGCTATCCACAGGCTGCTGTGATAGTAGAGGA 5375  
 QY 1982 TTGTCTTGTCCGGAAGCCGGCAATCATCCGACAGGGAAGTCTCTACGGGAGTTGG 2041  
 Db 5376 TTGTCTTGTCCGGAAGCCGGCAATCATCCGACAGGGAAGTCTCTACGGGAGTTGG 5435  
 QY 2042 ATGAATGAAGAGTGTCT 2059  
 Db 5436 ATGAATGAAGAGTGTCT 5453

RESULT 12  
 ID AAA75297 standard; cDNA, 9185 BP.  
 XX  
 AC AAA75297;  
 XX  
 DT 15-JAN-2001 (first entry)  
 XX  
 DE Sense strand of HCV encoding a polypeptide.  
 XX  
 KW Hepatitis C virus; HCV; antisense polynucleotide; polypeptide;  
 KW viral infectivity; viral replication; ds.  
 OS Hepatitis C virus.  
 XX  
 FT Key  
 FT CDS Location/Qualifiers  
 FT 320..9184  
 FT /\*tag= a  
 FT /note= "partial sequence; no termination codon given"  
 XX  
 PN EP1034785-A2.  
 PD 13-SEP-2000.  
 XX  
 PF 16-MAR-1990; 2000BP-00109602.  
 XX  
 PR 17-MAR-1989; 89US-00325338.  
 PR 20-APR-1989; 89US-00341334.  
 PR 18-MAY-1989; 89US-00355002.  
 PR 16-MAR-1990; 90BP-00302866.  
 XX  
 XX (CHTR ) CHIRON CORP.  
 XX  
 XX Houghton M, Choo Q, Kuo G;  
 PI  
 XX WPI; 2000-566891/53.



DR P-PSDB; AAB18541.

XX Novel composition comprising a hepatitis C virus antisense polynucleotide  
PT which is complementary to or corresponds to a sense strand of the virus  
PT genome, and selectively hybridizes to it.

XX Example; Fig 17; 75pp; English.

XX The specification describes a pharmaceutical composition which comprises  
CC a hepatitis C virus (HCV) antisense polynucleotide. The HCV is  
CC characterized by a positive stranded RNA genome which has 40% homology at  
CC the polypeptide level to a HCV polypeptide. The antisense polynucleotide  
CC binds to cellular polynucleotides which enhance and/or are required for  
CC viral infectivity, replicative ability or chronicity. The antisense  
CC polynucleotides may also be designed to bind with high specificity, to be  
CC of increased stability, to be stable and to have low toxicity. The  
CC composition also comprises an agent which causes viral RNA to be  
CC inactive. The composition is used for preventing HCV replication in a  
CC system. The present sequence represents a novel HCV cDNA sequence, which  
CC is used in the course of the invention

XX Sequence 9185 BP; 1849 A; 2790 C; 2608 G; 1938 T; 0 U; 0 Other;

Query Match 86.7%; Score 1786; DB 3; Length 9185;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1088; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

QY 2 TGGCCCTATCAAGCGCTATGCCAGACAGAGGGGCTTTGGAGTCATATCCACA 61  
DB 3396 TGGCCCTATCAAGCGCTATGCCAGACAGAGGGGCTTTGGAGTCATATCCACA 3455  
QY 62 GCTTACCGCGCGGACAAACCAAGTGAAGGTGAAGTTGATCGTGTCAACTGCTG 121  
DB 3456 GCTTACCGCGCGGACAAACCAAGTGAAGGTGAAGTTGATCGTGTCAACTGCTG 3515  
QY 122 CCAGACTTTCTTGGAACCTGCAATTAAGGGGTGTGTTGACTGTCTACATGAGCCG 181  
DB 3516 CCAGACTTTCTTGGAACCTGCAATTAAGGGGTGTGTTGACTGTCTACATGAGCCG 3575  
QY 182 GAACAAAGACATTTGGCTACCTAAGAGTCTGTTATCCAGATGTACACCAATGTGACC 241  
DB 3576 GAACAAAGACATTTGGCTACCTAAGAGTCTGTTATCCAGATGTACACCAATGTGACC 3635  
QY 242 AAGACTCTGTAAGTGGCGCGCTCCCAAGTGGCGCGCTCAATTAACACATGATGGC 301  
DB 3636 AAGACTCTGTAAGTGGCGCGCTCCCAAGTGGCGCGCTCAATTAACACATGATGGC 3695  
QY 302 GCTCTCGGACCTTTAAGCTGTACAGAGGACAGCCGATGTCAATTCCTGTGCGCCGAC 361  
DB 3696 GCTCTCGGACCTTTAAGCTGTGTACAGAGGACAGCCGATGTCAATTCCTGTGCGCCGAC 3755  
QY 362 GTGATGGACAGGGGACAGCTGTTTGGCCCGGCTATCTTTAATTGAAGGCTCTCTCG 421  
DB 3756 GTGATGGACAGGGGACAGCTGTTTGGCCCGGCTATCTTTAATTGAAGGCTCTCTCG 3815  
QY 422 GAGGCCCTTGTGTCGTCGCGCGGACAGATGCGGTAGGCAATTACAGCGCGGTATGCA 481  
DB 3816 GAGGCCCTTGTGTCGTCGCGCGGACAGATGCGGTAGGCAATTATTAAGGCGCGGTATGCA 3875  
QY 482 CCGGTGAGTGGCTAAGGGGCTGGAATTCATCCCGCTAGAGACTTAGAGCAACCATGA 541  
DB 3876 CCGGTGAGTGGCTAAGGGGCTGGAATTCATCCCGCTAGAGACTTAGAGCAACCATGA 3935  
QY 542 GGTCCCGGTGTTCTTCAACAATCTCTCCACACAGAGTGGCCCGGACTTCAAGTGG 601  
DB 3936 GGTCCCGGTGTTCTTCAACAATCTCTCTCCACACAGAGTGGCCCGGACTTCAAGTGG 3995  
QY 602 CCCACTGTGATGCTCCACCGGACGGGTGAAGAGCAAGATCCCGGCGGATAGCGAG 661  
DB 3996 CTCACCTCATGCTCCACAGGACGGGCAAAAGCAAGAGTCCCGGCTGACATAGCAG 4055  
QY 662 CTCAGGGCTAAGAGTGTGTGCTCAACCCCTCGTTGCTGCAACATAGGCTTTGCTG 721  
DB 721 CTCAGGGCTAAGAGTGTGTGCTCAACCCCTCGTTGCTGCAACATAGGCTTTGCTG 721

DB 4056 CTCAGGGCTAAGAGTGTGTGCTCAACCCCTCGTTGCTGCAACATGAGGCTTTGCTG 4115  
QY 722 CTTAATGTGCCAAGGCCCATGGGATTTGATTCCTAAGATCAGAGCTGAGGGGTAGAGCAATTA 781  
DB 4116 CTTAATGTGCCAAGGCCCATGGGATTTGATTCCTAAGATCAGAGCTGAGGGGTAGAGCAATTA 4175  
QY 782 CTTAATGTGCCAAGGCCCATGGGATTTGATTCCTAAGATCAGAGCTGAGGGGTAGAGCAATTA 841  
DB 4176 CCACTGGAGGCCCATTCAGTACCTCACCTACAGGCAAGTTCCTTCCGACGCGGGGTGCT 4235  
QY 842 CAGGGGGCTTTATGACATTAATTTGTGACAGTGCATCTCCAGATGCAATCCCA 901  
DB 4236 CAGGGGGCTTTATGACATTAATTTGTGACAGTGCATCTCCAGATGCAATCCCA 4295  
QY 902 TCTTGGGATTTGGCACTGTTCCTTGAACCAAGAGACCGCGGGGCGAGACTGATGTGC 961  
DB 4296 TCTTGGGATTTGGCACTGTTCCTTGAACCAAGAGACCGCGGGGCGAGACTGATGTGC 4355  
QY 962 TCGCACCGCTACCCCTCGGGCTCCGTCACTGTGCCCATCTTAACATCGAGAGTTTG 1021  
DB 4356 TCGCACCGCTACCCCTCGGGCTCCGTCACTGTGCCCATCTTAACATCGAGAGTTTG 4415  
QY 1022 CTGTGTCACTACCGGAGAGATCCCTTTTATGCAAGGCTATTCCTTGAAGCAATTA 1081  
DB 4416 CTGTGTCACTACCGGAGAGATCCCTTTTATGCAAGGCTATTCCTTGAAGCAATTA 4475  
QY 1082 AAGGGGGAGACATCTCATCTTCTTGCATCTCAAAAGAGTGCAGAGCTGCGCGCA 1141  
DB 4476 AAGGGGGAGACATCTCATCTTCTTGCATCTCAAAAGAGTGCAGAGCTGCGCGCA 4535  
QY 1142 AACTGTGCGCTTGGGCGTCAATGCGTGTGCTTACACGCGGCTTGTGTGCTGCA 1201  
DB 4536 AACTGTGCGCTTGGGCGTCAATGCGTGTGCTTACACGCGGCTTGTGTGCTGCA 4595  
QY 1202 TCCGACCAAGTGTGACGTTGTGTGTGTGCAATGACGCTCTATGACCGGCTTTACCG 1261  
DB 4596 TCCGACCAAGTGTGACGTTGTGTGTGTGCAATGACGCTCTATGACCGGCTTTACCG 4655  
QY 1262 GCGACTTGTGATTCGGTATGATCTGCAACAGTGTGTACCCAGACAGTGCATTCAGCC 1321  
DB 4656 GCGACTTGTGATTCGGTATGATCTGCAACAGTGTGTACCCAGACAGTGCATTCAGCC 4715  
QY 1322 TTGACCTTACCTTCAACATTTGAGCAATCAAGCTTCCCAAGATCTGTCTCCGTAATC 1381  
DB 4716 TTGACCTTACCTTCAACATTTGAGCAATCAAGCTTCCCAAGATCTGTCTCCGTAATC 4775  
QY 1382 AAGCTGTGGGTAGAGCTGGCAGAGGAAAGCAGGATCTACAGATTTGTGACCGGGG 1441  
DB 4776 AAGCTGTGGGTAGAGCTGGCAGAGGAAAGCAGGATCTACAGATTTGTGACCGGGG 4835  
QY 1442 AGCGTCTTGTGAGATGTTTGAATCTGTCTCTGCGAGTGTATGACGGGGTTTG 1501  
DB 4836 AGCGTCTTGTGAGATGTTTGAATCTGTCTCTGCGAGTGTATGACGGGGTTTG 4895  
QY 1502 CTTGGTATGAGCTTACGCGCGCGGACGACAGATTAAGGCTAGAGATTAAGAACACC 1561  
DB 4896 CTTGGTATGAGCTTACGCGCGCGGACGACAGATTAAGGCTAGAGATTAAGAACACC 4955  
QY 1562 CCGGACTTCCCGTGTGCAAGACATCTTGAATTTTGGAGGGCGTCTTTACGGGCTTCA 1621  
DB 4956 CCGGACTTCCCGTGTGCAAGACATCTTGAATTTTGGAGGGCGTCTTTACGGGCTTCA 5015  
QY 1622 CCAACATAGACGCCCATCTTCTTATCCAGACAAAGAGTGGGAAAACTTCCCTATC 1681  
DB 5016 CCAACATAGACGCCCATCTTCTTATCCAGACAAAGAGTGGGAAAACTTCCCTATC 5075  
QY 1682 TGGTACGTAACCAAGACACCGGTGCGGTAGAGCTCAAGCCCTCCCGCTGTGGAGAC 1741  
DB 5076 TGGTACGTAACCAAGACACCGGTGCGGTAGAGCTCAAGCCCTCCCGCTGTGGAGAC 5135  
QY 1742 AGATGTGAAGTGTCTTATCCGTCTCAAGCCCATCTCATAGGCAACCTCTGTCTAT 1801  
DB 5136 AGATGTGAAGTGTCTTATCCGTCTCAAGCCCATCTCATAGGCAACCTCTGTCTAT 5195

QY 1802 ATAGACTGGGCGCTGCTCCGAGATGAGTACCCCTGACCGCAGCTACCAATATATCA 1861  
DB 5136 ACAGACTGGGCGCTGCTCCGAGATGAGTACCCCTGACCGCAGCTACCAATATATCA 5255  
QY 1862 TGACATGATGTCGCGCTGACCTGAGAGTGTGTCACGATGATCTGTTGGCGGCG 1921  
DB 5256 TGACATGATGTCGCGCGGACCTGAGAGTGTGTCACGAGCAGCTGGGAGTGTGTTGGCGGCG 5315  
QY 1922 TTCTGGCTGCTTTGGCGCGGCTATTTGCTATCCACAGGCTGCGTGTATATGATGGA 1981  
DB 5316 TCCTGGCTGCTTTGGCGCGGCTATTTGCTATCCACAGGCTGCGTGTATATGATGGA 5375  
QY 1982 TTGCTGTGCGGAAAGCGCGCAATGATACCGGACAGGAGTCTCTACCGGAGTTGCG 2041  
DB 5376 TCGCTGTGCGGAAAGCGCGCAATGATACCGGAGAGTCTCTACCGAGAGTTGCG 5435  
QY 2042 ATGAATGGAAGATGCT 2059  
DB 5436 ATGAGATGGAAGATGCT 5453

RESULT 13  
ADN35979  
ID ADN35979 standard; cDNA; 9185 BP.

AC ADN35979;

DT 17-JUN-2004 (first entry)

DE HCV cDNA clone #2.

KM Antiviral; Vaccine; hepatitis C virus infection; HCV infection; ss.

OS Hepatitis C virus.

PN EP1394255-A2.

PD 03-MAR-2004.

PF 16-MAR-1990; 2003BP-00016585.

PR 17-MAR-1989; 89US-00325338.

PR 20-APR-1989; 89US-00341334.

PR 18-MAY-1989; 89US-00355002.

PR 16-MAR-1990; 90EP-00302866.

PA (CHIR ) CHIRON CORP.

PI Houghton M, Choo Q, Kuo G;

DR WPI; 2004-193149/19.

DR P-PSDB; ADN35978.

PT Novel purified hepatitis C virus polypeptide comprising epitope encoded  
PT by hepatitis C virus cDNA, useful as vaccine for treating hepatitis C  
PT virus.

PS Claim 1; Fig 17; 79PD; English.

CC The present invention relates to hepatitis C virus (HCV) proteins and  
CC cDNA sequences. The sequences are useful in immunoassays for detecting  
CC antibodies directed against HCV antigen; preparing host cells transformed  
CC with a recombinant polynucleotide; screening antiviral agents and  
CC determining the effect of antiviral agent in inhibiting viral replication  
CC in cell culture system; and developing vaccine for treating HCV  
CC infection.

XX Sequence 9185 BP; 1849 A; 2790 C; 2608 G; 1938 T; 0 U; 0 Other;

Query Match 86.7%; Score 1786; DB 12; Length 9185;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

QY 2 TGGGCGCTTATCAGCGGCTATGCGCCGAGCAGACGAAGGGGCTTTTGGGATGATATACCA 61  
DB 3386 TGGGCGCTTATCAGCGGCTATGCGCCGAGCAGACGAAGGGGCTTTTGGGATGATATACCA 3455  
QY 62 GCTTACCGGCGGAGCAAAAAACAGGTGAGGGGTGAGGTTGAGTCTGTCAACTGCTG 121  
DB 3456 GCTTACCGGCGGAGCAAAAAACAGGTGAGGGGTGAGGTTGAGTCTGTCAACTGCTG 3515  
QY 122 CCCAGACTTTCTTGGCAACTGCAATTAACGGGGGTGTGTGACTGTCTTACATGAGCCG 181  
DB 3516 CCCAGACTTTCTTGGCAACTGCAATTAACGGGGGTGTGTGACTGTCTTACATGAGCCG 3575  
QY 182 GAACAAAGACCAATGCGTCACTTAAAGGTCCTGTTATCAAGATGATACCAATGAGACC 241  
DB 3576 GAACAAAGACCAATGCGTCACTTAAAGGTCCTGTTATCAAGATGATACCAATGAGACC 3635  
QY 242 AAGACTGTAGGCTGAGCGCGCTCCCAAGGTGCGGCTCAATTAACCAATGCACTTGGC 301  
DB 3636 AAGACTGTAGGCTGAGCGCGCTCCCAAGGTGCGGCTCAATTAACCAATGCACTTGGC 3695  
QY 302 GCTCTCGGACTTTTACTGCTGACAGAGCAGCGGATGTCTTCTGTGCGCCGACGCGG 361  
DB 3696 GCTCTCGGACTTTTACTGCTGACAGAGCAGCGGATGTCTTCTGTGCGCCGACGCGG 3755  
QY 362 GTGATGAGAGGAGGAGCGCTGCTTGGCGCGGCTATCTCTTAATGAAAGGCTCTCGG 421  
DB 3756 GTGATGAGAGGAGGAGCGCTGCTTGGCGCGGCTATCTCTTAATGAAAGGCTCTCGG 3815  
QY 422 GAGGCGCTCTGCTGTGCGCGCAGAGCATGCCGTAGGACATTAAGAGCGCGGTATGCA 481  
DB 3816 GAGGCGCTCTGCTGTGCGCGCAGAGCATGCCGTAGGACATTAAGAGCGCGGTATGCA 3875  
QY 482 CCCGTGAGTGGCTTAAGCGGCTGACTTATCCCGTGAAGGCTTAAGAGCAACATTA 541  
DB 3876 CCCGTGAGTGGCTTAAGCGGCTGACTTATCCCGTGAAGGCTTAAGAGCAACATTA 3935  
QY 542 GGTCCCGGCTGTTTCAAGACCACTCTCCCAACAGAGTGCGCCGAGCTACCAAGTTG 601  
DB 3936 GGTCCCGGCTGTTTCAAGACCACTCTCTCCCAACAGAGTGCGCCGAGCTTCCAGTTG 3995  
QY 602 CCCACTGATGCTTCCCAACCGGAGCGGTGAAGAGCAAGGTCCCGCGCATAGCAG 661  
DB 3996 CCCACTGATGCTTCCCAACCGGAGCGGTGAAGAGCAAGGTCCCGCGCATATGAGC 4055  
QY 662 CTCAGGGCTTCAAGGTGCTGTGCTCAACCCCTCGGTGTCTGACCAATGAGGCTTTGGT 721  
DB 4056 CTCAGGGCTTATTAAGGTGCTGTGCTCAACCCCTCGGTGTCTGACCAATGAGGCTTTGGT 4115  
QY 722 CTATCATGTCGAAGGCCCATGGGATTTGATCTTACATCAGAGCTGGGGTGAAGCAATTA 781  
DB 4116 CTATCATGTCGAAGGCCCATGGGATTTGATCTTACATCAGAGCTGGGGTGAAGCAATTA 4175  
QY 782 CTACTGAGAGCCCGATCAAGTATTCACCTTACGGAAGTCTTTCGCGAGCGGCTGT 841  
DB 4176 CTACTGAGAGCCCGATCAAGTATTCACCTTACGGAAGTCTTTCGCGAGCGGCTGT 4235  
QY 842 CAGGGGGTCTTATATCAATTAATTTGTGACGATGCACTTCCAGATGCAATCCA 901  
DB 4236 CAGGGGGTCTTATATCAATTAATTTGTGACGATGCACTTCCAGATGCAATCCA 4295  
QY 902 TCTTGGGATTTGGGACTGCTGCTTGAAGAGAGACCGCGGGGCGAGACTGACTGTGC 961  
DB 4296 TCTTGGGATTTGGGACTGCTGCTTGAAGAGAGACCGCGGGGCGAGACTGACTGTGC 4355  
QY 962 TCGCAGACCGCTAACCCCTCGGCTCGGTCACTGTGCCCATCTTAACATGAGAGTTG 1021  
DB 4356 TCGCAGACCGCAGCCCTCGGCTCGGTCACTGTGCCCATCTTAACATGAGAGTTG 4415  
QY 1022 CTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGCTTATCCCTTGAAGCAATTA 1081  
DB 4416 CTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGCTTATCCCTTGAAGCAATTA 4475



Qy	1082	AGGGGGGAGACATCTCACTCTTTCGGCCACTCAAAAGAAAGAACTGGAGCAGCTCGCCGAA	11411
Db	4476	AGGGGGGGAGACATCTCACTCTTTCGTCACTTTCGTCACTTCAAAAGAAAGAACTGGAGCAGCTCGCCGAA	45355
Qy	1142	AACTGTCGCGCTTGGGCGCTCAATGCGCGCTTACCTACCGCGCGCTTGAATGTCGCTCA	1201
Db	4536	AGCTGTCGCACTTGGGCGCATCAATGCGCGCTTACCTACCGCGCGCTTGAATGTCGCTCA	45955
Qy	1202	TCCCGACCAAGTGTGAAGCTTGTGCTGTCGTGGCACTGACGCGCTTCACTGACCGGCTTTACCG	1261
Db	4596	TCCCGACCAAGGCGGAGTGTGTGCTGTCGTGGCAAGCAATGCGCTTCACTGACCGGCTTACCG	46555
Qy	1262	GCGACTTCGATTCGAGTGAATACCTGCAACAGCTGTGTCAACCGACAGCAGTGCAGCTTCAAGC	1321
Db	4656	GCGACTTCGATTCGAGTGAATACCTGCAACAGCTGTGTCAACCGACAGCAGTGCAGCTTCAAGC	47155
Qy	1322	TTGACCCCTACCTTGACCACTTGAAGCAATACGCTTCCGAGAGTGTGTCTCCGCTACTC	1381
Db	4716	TTGACCCCTACCTTGACCACTTGAAGCAATACGCTTCCGAGAGTGTGTCTCCGCACTC	47755
Qy	1382	AACTCGGGGTGAAGACTGGGCAAGAGGAAGCCAGGCACTTACAGATTTGTGGCACCGGGG	1441
Db	4776	AACTCGGGGTGAAGACTGGGCAAGAGGAAGCCAGGCACTTACAGATTTGTGGCACCGGGG	48355
Qy	1442	AGCCTCCCTTCGCGATGTTTGACTGCTGTGCTCTGCGAGTGCATGACGCGGGTTGTG	1501
Db	4836	AGCCTCCCTTCGCGATGTTTGACTGCTGTGCTCTGCGAGTGCATGACGCGGGTTGTG	48955
Qy	1502	CTTGATATGACTTAAAGCCGCGCGAGACACAGTTAAGGCTTACAGCATACATGAACACC	1561
Db	4896	CTTGATATGACTTAAAGCCGCGCGAGACACAGTTAAGGCTTACAGCATACATGAACACC	49555
Qy	1562	CGGGACTTCCCGTGTGCCAAGACCATCTTGAATTTTGGAGGGGCTCTTACGGGCTTCA	1621
Db	4956	CGGGACTTCCCGTGTGCCAAGACCATCTTGAATTTTGGAGGGGCTCTTACGGGCTTCA	50155
Qy	1622	CCCACTATAGACGCCACTTCTTATCCCAAGAAAGACAGTGGGGAAGAACTTCCCTATC	1681
Db	5016	CTCATATATAGATGCCCACTTCTTATCCCAAGAAAGACAGTGGGGAAGAACTTCTTACC	50755
Qy	1682	TGTTAGCGTACCAAGCCACGCTGTGCGCTAAGAGCTCAAGCCCCCTCCGCTGTGGAGCC	1741
Db	5076	TGTTAGCGTACCAAGCCACGCTGTGCGCTAAGAGCTCAAGCCCCCTCCCACTGTGGAGCC	51355
Qy	1742	AGATGTGAAGTGTGATTCGCTTCAAGGCCACCTTCAATGGGCGCAACACTTGTGCTAT	1801
Db	5136	AGATGTGAAGTGTGATTCGCTTCAAGGCCACCTTCAATGGGCGCAACACTTGTGCTAT	51955
Qy	1802	ATAGACTGGGCGCTGTCCAGATATGAAGTCAACCTTGACGACCCAGTACCAAGATATATCA	1861
Db	5196	ACAGACTGGGCGCTGTTCAGATATGAATCAACCTTGACGACCCAGTACCAAGATATATCA	52555
Qy	1862	TGACATGATATGCGAGCTGAAGCTGTGAAGGTGCTCACAGATACCTGGGTGCTCGTTGGCGCG	1921
Db	5256	TGACATGATATGCGAGCTGAAGGTGCTGTGAAGGTGCTCACAGATACCTGGGTGCTCGTTGGCGCG	53155
Qy	1922	TTTCGCGCTGCTTTGGCGCGCGATTTGGCTATCCACAGGCTGTGTGTCTATATGATATGGA	1981
Db	5316	TTTCGCGCTGCTTTGGCGCGCGATTTGGCTATCCACAGGCTGTGTGTCTATATGATATGGA	53755
Qy	1982	TTGTCTTGTCCGGAAGCCGCGCAATATCAATCCGACAGGGAAGTCTCTACCGGAGTTTCG	2041
Db	5376	TTGTCTTGTCCGGAAGCCGCGCAATATCAATCCGACAGGGAAGTCTCTACCGGAGTTTCG	54355
Qy	2042	ATGAATATGAAGATGCT 2059	
Db	5436	ATGAATATGAAGATGCT 5453	

RESULT 14  
AAT12710  
ID AAT12710 standard; cDNA; 9401 BP.  
XX

XX	AA1212710,
XX	25-MAR-2003 (revised)
XX	15-MAY-1996 (first entry)
XX	Hepatitis C virus polypeptide.
XX	Hepatitis C virus polypeptide.
XX	Non-A non-B hepatitis virus; NANBHV; HCV; antigen; detection; diagnosis;
XX	antibodies; ds.
XX	Hepatitis C virus.
XX	Key
XX	CDS
XX	Location/Qualifiers
XX	342..9378
XX	/*tag= a
XX	EP693687-A1.
XX	24-JAN-1996.
XX	03-APR-1991; 95EP-00114016.
XX	04-APR-1990; 90US-00504352.
XX	(CHIR ) CHIRON CORP.
XX	Houghton M, Choo Q, Kuo G;
XX	WPI; 1996-117956/13.
XX	P-PSDB; AAR90931.
XX	Combinations of synthetic Hepatitis C virus antigens - provide more
XX	effective diagnosis of Non-A, Non-B Hepatitis.
XX	Disclosure; Fig 1(A-Y); 53pp; English.
XX	The combination comprises an HCV antigen from the C domain (pref. C22 -
XX	AAR909316) and at least one HCV antigen from the NS3 (pref. C33C -
XX	AAR909312), NS4 (pref. C100 - AAR909313), S (pref. S2 - AAR909315) or NS5
XX	(AAR909314) domain. The antigens may in the form of a fusion protein, a
XX	CC simple physical mixture, or the individual antigens commonly bound to a
XX	solid matrix. They are pref. prepd. by recombinant DNA techniques
XX	(primers are given in AA1212711-112716), but can be synthesised or
XX	isolated from HCV using affinity chromatography. (Updated on 25-MAR-2003
XX	to correct PF field.)
XX	Sequence 9401 BF; 1883 A; 2860 C; 2673 G; 1985 T; 0 U; 0 Other;
XX	Query Match 86.7%; Score 1786; DB 2; Length 9401;
XX	Best Local Similarity 91.7%; Pred. No. 0;
XX	Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;
XX	2 TGGGGGCTTATCAGGCGCTTATGCTTACGAGCAAGGGGCTTTGGGATGCTATATCAACA 61
XX	3418 TGGGGGCTTATCAGGCGCTTATGCTTACGAGCAAGGGGCTTTGGGATGCTATATCAACA 3477
XX	62 GCTTACCGGCGCGGAGCAAAAACAGGTGAGGGTGAAGTTCAAGATGCTGCAACTGCTG 121
XX	3478 GCTTACCGGCGGAGCAAAAACAGGTGAGGGTGAAGTTCAAGATGCTGCAACTGCTG 3537
XX	122 CCCAGACTTTCTTGGCAACTGCAATTAAGGGGTGTGTGGACTGTCTTACCATGAGCCG 181
XX	3538 CCCAGACTTTCTTGGCAACTGCAATTAAGGGGTGTGTGGACTGTCTTACCATGAGCCG 3597
XX	182 GAACGAGGACCTTGGCTGCACTTAAGGTCTCTGTATTCAGATGTACACCAATGTGAC 241
XX	3598 GAACGAGGACCTTGGCTGCACTTAAGGTCTCTGTATTCAGATGTACCAATGTGAC 3657
XX	242 AAGACTCTGTAGGCTGAGCCGCTCCCAAGGTGCGGCTGATTAACACCAATGTGAC 301
XX	3658 AAGACTCTGTAGGCTGAGCCGCTCCCAAGGTGCGGCTGATTAACACCAATGTGAC 3717
XX	302 GCTCTCTGGAACCTTATCAGGAGGACGCGGATGCTATTCCTGTGCGCGGAGCGG 361

Db 3718 GCTCTCGGACCTTTACCTGGTCAAGAGGACAGCGATGTCAATCCCGTGGCCGGCGGG 3777  
Qy 362 GTGATGGCAGGGGACAGCTGCTTTTGGCCCGGCTATCTTTACTTTGAAGGCTCTCGG 421  
Db 3778 GTGATAGCAGGGGACAGCTGTGTGCCCCGGGCCCATTTCTTACTTTGAAGGCTCTCGG 3837  
Qy 422 GAGGGCTCTGTGTGGCCCCGAGGACATGGCGTATGGCATTTTCAAGCGGGATGCA 481  
Db 3838 GGGGTCCGTGTGTGGCCCCGAGGACAGCGGTGGCATTTTGAAGCGCGGTGTGCA 3897  
Qy 482 CCCGTGAGTGTGCTAAGCGGTGCACTTTCATCCCGTATAGAGCTTTAGAGAACCATGA 541  
Db 3898 CCCGTGAGTGTGCTAAGCGGTGCACTTTCATCCGTGTGAGAACCTAGAGAACCATGA 3957  
Qy 542 GGTCCCGGTGTTCTCAGAACCTCTCCACACAGAGTGGCCAGAGCTACCAAGTGG 601  
Db 3958 GGTCCCGGTGTTCTCAGAACCTCTCTCAGAACAGTATGGCCAGAGCTTCCAGTGG 4017  
Qy 602 CCACCTGATGCTCCACCGGACGGGTAGAGACCAAGGTCCCGGCGGATCCGAG 661  
Db 4018 CTCACCTCATGCTCCACAGGAGCGGAAAGACCAAGGTCCCGGCTGCAATGCAAG 4077  
Qy 662 CTCAGGGCTACAGGTGTGTGTCAACCCCTCCGTGCTGCAACATGAGGCTTGTGTG 721  
Db 4078 CTCAGGGCTATAGGTGTGTGTCAACCCCTCTGTGTGTGCAACATGAGGCTTGTGTG 4137  
Qy 722 CTTCATGTGTCAGAGGCCCATGGGATTTGATCTTACATCAGAGCTGGGGTGAAGCAATTA 781  
Db 4138 CTTCATGTGTCAGAGGGCTCATGGGATCGATCTTACATCAGAGCCGGGGTGAAGCAATTA 4197  
Qy 782 CTACTGGCAGCCGATCAGTATTCACCTACGGGCAAGTTCCTTGGCCAGCGGGGTGT 841  
Db 4198 CCACTGGCAGCCCATCAGTACTCCACTTACGGCAAGTTCCTTGGCCAGCGGGGTGT 4257  
Qy 842 CAGGGGTGTCTTATGACATATATTTTGTGACAGAGTGGCCATCCAGATGCAATCCA 901  
Db 4258 CGGGGGGGCTTATGACATATATTTTGTGACAGAGTGGCCATCCAGATGCAATCCA 4317  
Qy 902 TCTTGGGCTTGGCAGCTGTCTTGTGACAGAGACCGGGGGGAGAGCTGACTGTGC 961  
Db 4318 TCTTGGGCTTGGCAGCTGTCTTGTGACAGAGACCGGGGGGAGAGCTGACTGTGC 4377  
Qy 962 TGGCAGCGCTACCCCTCGGGGTGCTGACTGTGCGCCCATCTTACATCGAGAGTGG 1021  
Db 4378 TGGCAGCGCTACCCCTCGGGGTGCTGACTGTGCGCCCATCTTACATCGAGAGTGG 4437  
Qy 1022 CTCTGTCCACTACCGAGAGATCCCTTTTATGGCAAGGCTATTCCTTGAAGCAATTA 1081  
Db 4438 CTCTGTCCACTACCGAGAGATCCCTTTTATGGCAAGGCTATTCCTTGAAGTATCA 4497  
Qy 1082 AGGGGGGAGACATCTCTTCTGTGCACTCAAGAGAGAGTGGCAGAGCTGCGCGCA 1141  
Db 4498 AGGGGGGAGACATCTCTTCTGTGCACTCAAGAGAGAGTGGCAGAGCTGCGCGCA 4557  
Qy 1142 AACTGTGCGTGGGCGTCAATGCCGTGGCTTACTACCGGGGCTTGTGTGCGTGA 1201  
Db 4558 AACTGTGCGTGGGCGTCAATGCCGTGGCTTACTACCGGGGCTTGTGTGCGTGA 4617  
Qy 1202 TCCCGACAGTGTGACGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1261  
Db 4618 TCCCGACAGGCGGCGATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4677  
Qy 1262 GCGACTTGCATTCGGATAGAGCTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1321  
Db 4678 GCGACTTGCATTCGGATAGAGCTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4737  
Qy 1322 TTGACCTTCACTTCACTTGAAGCAATACAGCTTCCAGAGATGTGTGTGTGTGTGTGTGT 1381  
Db 4738 TTGACCTTCACTTCACTTGAAGCAATACAGCTTCCAGAGATGTGTGTGTGTGTGTGT 4797  
Qy 1382 AACGTGCGGGTGAAGCTGGCAGAGGAGACAGGCACTTACAGATTTGTGTGTGTGTGTGT 1441

Db 4798 AACGTGCGGGAGAGACTGGCAGGGGGAAGCCAGGATCTACAGATTTGTGTGTGTGTGTGT 4857  
Qy 1442 AGCGTCTTCTGGGATGTTTATCTGTCTGTCTGTCTGTGTGTGTGTGTGTGTGTGTGTGT 1501  
Db 4858 AGCGTCTTCTGGGATGTTTATCTGTCTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGT 4917  
Qy 1502 CTGTGTATGAGCTTACGCGCCCGGAGACACAGTATGAGCTACAGATATGATGACACCC 1561  
Db 4918 CTGTGTATGAGCTACGCGCCCGGAGACACAGTATGAGCTACAGATATGATGACACCC 4977  
Qy 1562 CCGGACTTCCGTGTGCGCAAGACCATCTTGAATTTTGGAGGGCGTCTTTACGGTCTCA 1621  
Db 4978 CCGGACTTCCGTGTGCGCAAGACCATCTTGAATTTTGGAGGGCGTCTTTACGGGCTCA 5037  
Qy 1622 CCCATATGAGCGCCACTTCTATCTCCAGACAGACAGAGTGGGGAACCTTCCCTATTC 1681  
Db 5038 CTCAATATGAGTCCACTTCTATCTCCAGACAGACAGAGTGGGGAACCTTCCCTATTC 5097  
Qy 1682 TGGTAGCGTACCAAGCCAGCTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGGAGC 1741  
Db 5098 TGGTAGCGTACCAAGCCAGCTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGGAGC 5157  
Qy 1742 AGATGTGAGTGTGTATCCGTCTCAAGCCCATCTTCATGGGCAACACTGTGTAT 1801  
Db 5158 AGATGTGAGTGTGTATCCGTCTCAAGCCCATCTTCATGGGCAACACTGTGTAT 5217  
Qy 1802 ATAGATGAGGCGCTGTCCAGATGAGTCAACCTTGAACCAAGCTTCAAGATATATTA 1861  
Db 5218 ACAGATGAGGCGCTGTCCAGATGAGTCAACCTTGAACCAAGCTTCAAGATATATTA 5277  
Qy 1862 TGAATGTATGTGCGCTGACCTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1921  
Db 5278 TGAATGTATGTGCGCTGACCTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5337  
Qy 1922 TTCTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1981  
Db 5338 TTCTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5397  
Qy 1982 TTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2041  
Db 5398 TTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5457  
Qy 2042 ATGAATGAGAGAGTGTCT 2059  
Db 5458 ATGAATGAGAGAGTGTCT 5475

RESULT 15  
AAT9981  
ID AAT9981 standard; DNA; 9401 BP.  
XX  
AC AAT9981;  
XX  
DT 25-MAR-2003 (revised)  
XX  
DT 16-MAR-1998 (first entry)  
XX  
DE HCV polyprotein coding sequence.  
XX  
KW PCR primer; amplify; HCV; hepatitis c virus; antigen combination; NS3;  
KW C domain; S domain; NS5; HCV polyprotein; anti-HCV antibody; detection;  
XX NS4; de.  
OS Hepatitis C virus.  
XX  
XX Key Location/Qualifiers  
FH CDS 342..9377  
FT FT /\*tag= a  
XX  
PN US5683864-A.  
XX  
XX 04-NOV-1997.  
PD  
XX 07-JUL-1992; 92US-00910760.

XX	PR	18-NOV-1987;	87US-00122714.
XX	PR	30-DEC-1987;	87US-00139886.
XX	PR	26-FEB-1988;	88US-00161072.
XX	PR	06-MAY-1988;	88US-00191263.
XX	PR	26-OCT-1988;	88US-00263584.
XX	PR	14-NOV-1988;	88US-00271450.
XX	PR	17-MAR-1989;	89US-00325338.
XX	PR	20-APR-1989;	89US-00341334.
XX	PR	21-APR-1989;	89US-00353896.
XX	PR	18-MAY-1989;	89US-00355002.
XX	PR	04-APR-1990;	90US-00504352.
XX	PA	(CHIR ) CHIRON CORP.	
XX	PI	Kuo G, Houghton M, Choo Q:	
XX	DR	WPI, 1997-549876/50.	
XX	DR	P-P8DB; AAM34480.	
XX	PT	Combination of three hepatitis C virus antigens - used for detection of specific antibodies to diagnose infection.	
XX	PS	Disclosure; Col 25-46; 57pp; English.	
CC	CC	This sequence represents the Hepatitis C virus polyprotein coding sequence. Fragments of this sequence can be amplified and used in the combination of HCV antigens of the invention. The HCV antigen combination comprises an antigen (Ag1) comprising the C domain (i.e. amino acids (aa) 1-120 of the HCV polyprotein), or its immunologically reactive fragment containing at least 8 aa. It also comprises two additional antigens from two different polypeptide domains, including at least 8 aa from the NS3, NS4, S or NS5 domains of the polyprotein, corresponding, respectively, to aa.1050-1640; 1640-2000; 120-400 and 2000-3011 of the HCV polyprotein. Alternatively, Ag1 contains at least 8 aa from the 1-122 or 9-177 aa regions of the HCV polyprotein. These antigen combinations are used diagnostically to detect anti-HCV antibodies, using any standard immunoassay format. These antigen combinations have a broader range of reactivity with antibodies than any antigen individually. (Updated on 25-MAR-2003 to correct PR field.)	
SQ	SQ	Sequence 9401 BP, 1883 A; 2860 C; 2673 G; 1985 T; 0 U; 0 Other;	
		Query Match 86.7%; Score 1786; DB 2; Length 9401;	
		Best Local Similarity 91.7%; Pred. No. 0;	
		Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;	
OY	DJ	2 TGGCGCCTATCA CGGCCTTATGCCCCAGACAGAAGGGGCTTTGGAGATCATTAATCACCA 61	
		3418 TGGCCCCATCA CGCGCTATCGCCCAGACAGACAAGGGGCTCTTAGGGTGCTAATACACA 3477	
OY	DJ	62 GTTACACGGGCCGGGAACA AAAACCAAGGTGAGGGTGAAGTTGAGATCGTAACTGCGC 121	
		3478 GCTTAAC TGCCGGGACAAAACCAAAGTGAGAGGTGAGATTGTGTAACCTGCGC 3533	
OY	DJ	122 CCCAGACTTTCTTGCCAACCTTGATTAACGGGGTGTGTGAGACTGTCTTACCAATGAGCGC 181	
		3538 CCCAACCTTCCTGCGAACGTGCATCAATGAGGGGTGTGCTGAGACTGTCTTACCAACGGGGCGC 359	
OY	DJ	182 GAACAGAACA CATTGCGTCACTTAAGAGGTCTGTTATCCAGATGTACACCAATGTGAAAC 241	
		3598 GAACAGAGACCAATCGCGTCAACCAAGGGGTCTGTCAATCAAGATGTATACCAATGTAGAAC 3655	
OY	DJ	242 AAGACCTGTAGGCGTGGCCCGGTCCCAAGAGTCCCGCTCATTAACAACATGCACTTGGC 301	
		3658 AAGACCTGTGAGCGTGGCCCGGTCCCGCAAGATGAGCGCGCTCATTTGACACCCTGCACTTGGC 3711	
OY	DJ	302 GCTCTCGGACCTTTACCTGTGTACAGAGCAGCGCATGTCTATTCCTGTGCGCCGACGGG 361	
		3718 GCTCTCGGACCTTTACCTGTGTACAGAGCAGCGCATGTCTATTCCTGTGCGCCGACGGG 3777	
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Db	3778	GTGATAGACAGGGGACAGCTGCTGTGTGCGCCGGCCCAATTTCTTACTTGAAGAGCTCTCCG	3897
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Db	3838	GGGGGCGCGTGTGTGCCCCCGGGGGACGCGGTGGGCATATTATTAAGGCGCCGCGTGTGCA	3897
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Qy	542	GATCCCGCGGTGTTCTCAGACAACACTCTTCCCAACAGAGAGTGCCGCCAAGCTAACGAATGG	601
Db	3958	GGTCCCGCGGTGTTCAACGGATTAATCTCTCTCCACCAATGATGCCCCAAGACTTCCAGGTGG	4017
Qy	602	CCCACTTGATGCTCTCCACCGCGCAGCGGTAAAGACACCAAGTCCGCGCGCATAGCAG	661
Db	4018	CTACACTTCATGCTCCACAGGACGCGCAAAAGACCAAGGTCCGCGCTGCAATATCAG	4077
Qy	662	CTCAGGGCTTAAGAAGTGTGTGCTCAACCCCTCCGTTGCTGCAACAATGGGCTTTTGTC	721
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Qy	722	CTTACATGTTCCAAAGGCCCATGGAGTTGATCTTCAATCAGGACTGGGGTGAAGCAATTA	781
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Qy	782	CTACTGGACAGCCGATCAAGTATTCACCTTAACGGCAAGTTCCTTTCGACGCGCGGTGTT	841
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Qy	842	CAGGGGGTGCTTATGACATAATTAATTTGTGACGAGTGCACCTCAACGATGCAACATCA	901
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Qy	962	TGCGACACCGCATACCCCTCCGGGCTCCGTCATCTGTGCCCATCTTAATCAGAGAGGTG	1021
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Qy	1142	AAGTGTGTGCGTGTGGGCGTCAATGCGCGGTCTTAACCGCGGCGCTTGATGTGTCCGTCA	1201
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Qy	1202	TCCGACCAAGTGTGACGTTGTGCTGTGCGTGTGACATGACGCCCTCATGACCGGCTTTTACG	1261
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Qy	1442	AGCGTCTTCTGTGCAATTTTGAATCTGTGTGTCTCTGTGCAATGTGCTATGACCGCGGTGTG	1501
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Job time : 1265 secs

GenCore version 5.1.7  
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OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:15:05 ; Search time 8380 Seconds  
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11506.942 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061  
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Scoring table: IDENTITY\_NUC  
Gapop 10.0 , Gapext 1.0

Searched: 41078325 seqs, 23393541228 residues

Total number of hits satisfying chosen parameters: 82156650

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%  
Maximum Match 100%  
Listing first 45 summaries

Database :

EST:\*

1: gb\_ests1:\*

2: gb\_ests2:\*

3: gb\_ests3:\*

4: gb\_hic:\*

5: gb\_ests4:\*

6: gb\_ests5:\*

7: gb\_ests6:\*

8: gb\_ests7:\*

9: gb\_g881:\*

10: gb\_g882:\*

11: gb\_g883:\*

Pred. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
C 1	514.2	24.9	849	10	CZ990300 207380 To
C 2	465.4	22.6	824	10	CZ990751 207976 To
C 3	450.8	21.9	769	10	CZ990230 207284 To
C 4	385.8	18.7	852	10	CZ990303 207384 To
C 5	374.2	18.2	817	10	CZ990242 207300 To
C 6	261.4	12.7	980	10	CZ934124 251577 To
C 7	170.4	8.3	891	10	CZ990535 207704 To
C 8	142.4	6.9	922	10	CZ990744 207968 To
C 9	46.8	2.3	509	10	CL252974 ZMMBB060
C 10	44.8	2.2	935	10	CNS006XK
C 11	44.4	2.2	834	3	BI956973 HVSMB000
C 12	43.4	2.1	666	3	BM950570 UI-M-EB0P
C 13	43.4	2.1	793	8	CM61874 V01011F01
C 14	43.4	2.1	860	8	CM61874 V01011F01
C 15	42.8	2.1	1863	7	CV068974 f2 new ch
C 16	42.6	2.1	633	3	BI959933 HVSMB002
C 17	42.2	2.0	871	6	CD437613 EL01N0503
C 18	41.8	2.0	564	2	BE291962 60108550
C 19	41.8	2.0	673	2	BI155705 60290453
C 20	41.8	2.0	700	8	CM206704 MNS11040
C 21	41.8	2.0	935	5	BO876256 AGENCOURT
C 22	41.8	2.0	1020	5	BY711719 BY711719

C 23	41.8	2.0	1409	4	AK012576 Mus muscu
C 24	40.8	2.0	925	10	CNS0091P
C 25	40.6	2.0	790	8	DR812017 ZM BRB004
C 26	40.4	2.0	533	3	BJ277484 BJ277484
C 27	40.4	2.0	750	10	CZ544987 SRBA-aads
C 28	40.4	2.0	1749	10	CL948408
C 29	40.2	2.0	574	3	BJ208789 BJ208789
C 30	40.2	2.0	629	2	BS906349 BJ208789
C 31	40.2	2.0	684	3	BI956133 HVSMB002
C 32	40.0	1.9	544	7	CO975862 BEG30N20H
C 33	40.0	1.9	697	7	CN944784 011003AVB
C 34	39.8	1.9	624	4	CD938118 OV.109B20
C 35	39.8	1.9	640	7	CO967445 BE930N08F
C 36	39.8	1.9	896	2	BS969273 602836743
C 37	39.6	1.9	424	5	BO665971 HZ01L20u
C 38	39.6	1.9	429	5	BO665888 HZ01H12u
C 39	39.6	1.9	430	5	BO665954 HZ01L02u
C 40	39.6	1.9	468	8	DN390574 DN390574
C 41	39.6	1.9	574	6	CB873738 HCL13G14Y
C 42	39.6	1.9	595	5	CA013559 HT08N10r
C 43	39.6	1.9	641	6	CD861674 AZ01.003E
C 44	39.6	1.9	751	6	CF452146 EST688491
C 45	39.6	1.9	848	7	CV069194 WPAEBHUX15

#### ALIGNMENTS

RESULT 1  
LOCUS CZ990300 849 bp DNA linear GSS 11-AUG-2005  
DEFINITION 207380 Tomato MboI BAC library Lycopersicon esculentum genomic  
clone SL\_MboI0131C03 5, genomic survey sequence.  
ACCESSION CZ990300  
VERSION CZ990300.1 GI:72341945  
KEYWORDS GSS.  
SOURCE Lycopersicon esculentum (Solanum lycopersicum)  
ORGANISM Lycopersicon esculentum  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;  
asterids; lamiales; Solanales; Solanaceae; Solanum; Lycopersicon.  
1 (bases 1 to 849)  
REFERENCE Mueller,L.A., Buel,S.R.M., Wang,Y., Tankaley,S.D., Giovannoni,J.J.,  
Van Eck,J. and Stack,S. BAC end sequencing from three Solanum lycopersicon libraries  
Unpublished (2005)  
OTHER GSSs: 207379  
CONTACT: Lukas Mueller  
Tanksley Lab, Dept. of Plant Breeding  
Cornell University  
251 Emerson Hall, Ithaca, NY 14853, USA  
Tel: 607-255-6557  
Fax: 607-255-6683  
Email: sgm-feedback@cornell.edu  
Plate: 131 row: C column: 3  
Seq primer: 17  
Class: BAC ends  
High quality sequence start: 25  
High quality sequence stop: 464.  
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ORIGIN  
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Best Local Similarity 86.0%; Pred. No. 2.9e-131;

Matches 570; Conservative 0; Mismatches 93; Indels 0; Gaps 0;

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OY	137	CAACTGATTAAACGGGGTGTGTGTTGGACTGTCTACCATGAGACCGGAAACAGAACATTG	196
Db	608	GCAACCGATATPACGGGGTGTGATGACAGTATPACAGGGGGCCGGAAACAGACCATCG	549
OY	197	CGTCACTTAAAGGTCTCTGTATCCAGATGTACACCAATGTGGAACCAAGACTCTGTAGGCT	256
Db	548	GSTACCCAGAGGTATGTATTATCCAGATGTACCAATGTGACCAAGACTGTGAGGCT	489
OY	257	GAGCCGCTCCCAAGGTGCGCGCTATTAAACAATGCATCTTGCGGCTCTTCGGA	316
Db	488	GGCCCGCTCCCAAGGTGTGCTCATTTAACACTGTGACTTGCGGCTCTTCGGA	429
OY	317	ACTGTGTCAAGAGGACCGCCGATGTTCATTCCTGTGCGCCGACGGGGTGTGCGAGGGCA	376
Db	428	ACTGTGTCAAGAGGACCGCCGATGTTCATTCCTGTGCGCGCGGGGTGTACAGCAGAGCA	369
OY	377	GCCTCTTTGCGCCCGGACTATCTCTTACTTGAAGGCTCTCGGAGAGGACCTCTGCTGT	436
Db	368	GCTGTCTCTCGCCCGGCTATCTCTTACTTGAAGGCTCTCTCGGGGGGCCCACTGTCTGT	309
OY	437	GCCCCGACAGACATCCCGTAGGCAATTTCAAGCCGCGGTATGCAACCCGTGAGTGGCTA	496
Db	308	GCCCCGCGGACACCTGTAGGCATATTTAGGGCCGCGGTGTGCAACCCGTGAGTGGCTA	249
OY	497	AGGGGTGGACTTCATCCCGGTAGAGAGCTTGAAGCAACATGAGGTCCCGGGTGTCT	556
Db	248	AGGGGTGGAATTTTGTCCCGTGAAGAGCTTGAAGCAACATGAGTCCCGGGTGTCTA	189
OY	557	CAGACAACTCTCTCCCAACAGCAGTGCCTCCAGAGCTAACCAATGGCCCACTGTACGTCT	616
Db	188	CGGACAACTCTCTCCCAACAGCAGTGCCTCCAGAGCTTCAAGGTGGCTCACTGTACGTCT	129
OY	617	CCACCGGACGGGTAAAGACACCAAGTTCCTCGGCGGCAATGCCAGCTCAGGGCTTCAAG	676
Db	128	CCACCGGACGGGTAAAGACACCAAGTTCCTCGGCGGCAATGCCAGCTCAGGGCTTCAAG	69
OY	677	TGCTGTGCTCAACCCCTCTCGTGTGTCAACATGTGGCTTTGTGTTCATGTCCAAAG	736
Db	68	TGCGGTGTCTCAACCCCTCTCGTGTGTCAACATGTGGCTTTGAAGGATTAAGAGGAAATGG	9
OY	737	CCC 739	
Db	8	CGC 6	

RESULT 2				
LOCUS	CZ990751			
DEFINITION	207976 Tomato MboI BAC library Lycopersicon esculentum genomic	924 bp	DNA	linear
ACCESSION	CZ990751			
VERSION	CZ990751.1			
KEYWORDS	GSS.			
SOURCE	Lycopersicon esculentum (Solanum lycopersicum)			
ORGANISM	Lycopersicon esculentum			
REFERENCE	Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; lamids; solanales; Solanaceae; Solanum; Lycopersicon.			
AUTHORS	1 (bases 1 to 824) Mueller, L.A., Buelz, R.M., Wang, Y., Tanksley, S.D., Giovannoni, J.J., Van Eck, J. and Stack, S.			
TITLE	BAC end sequencing from three Solanum lycopersicon libraries			
JOURNAL	Unpublished (2005)			
COMMENT	Other GSSs: 207975			
	Contact: Lukas Mueller			
	Tanksley Lab, Dept. of Plant Breeding			
	Cornell University			

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Email: [sgn-feedback@sgn.cornell.edu](mailto:sgn-feedback@sgn.cornell.edu)

Email: bgn-feedback@bgn.cornell.edu  
 Row: 0 Column: 131 Plate: 131

Plate: 131  
Set primer:

Seq primer: T7

Class: BAC ends

High quality sequence start: 16

## FEATURES

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Best Local Similarity	87.8%	Pred. No. 1.1e-117;		
Matches 531; Conservative	0;	Mismatches 71;	Indels 3;	Gaps 2

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Db	119	TGGGGCCCATCACGGCTGATGCCACGACGAGAGAGGGGGCTCTTGGGGTGCAATTAATCCA	178
QY	62	GCTTGACCGGCGGGGACAAAAAACGAGGTGAGAGGGTGAAGTTCCAGATCGGTACATCTGCTG	121
Db	179	GCTTGACCGGCGGGGACAAAGAACGAGGTGAGAGGGTGAAGTTCCAGATTTGTGTCAATCTGCCG	238
QY	122	CCGAGACTTTCCTTGGCAAACCTGCATTAACGGGGGTGTGTGAGCTGTCTACCAATGAGCCG	181
Db	239	CCGAGACTTTCCTTGGCAAACCTGTATTAAACGGGGGTGTGTGAGCCGTACACCGGGGCGG	298
QY	182	GAACAAGAACCATTTGCGTCACTTAAGGCTCTGTATTATCAATGATACACCAATGTGAGCC	241
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QY	242	AAGACTCTGTAGGCTGGCCCGCTCCCAAGGTGCGCGCTCATTTAACACCATGCACTTGGC	301
Db	359	AAGACTCTGTAGGCTGGCCCGCTCCCAAGGTGCGCGCTCATTTAACACCATGCACTTGGC	418
QY	302	GCTCTCTGGAACTTTACTGTGTACAGAGGCAAGCCGATGTCAATTCTGTGCGCCGACGGG	361
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QY	482	CCCGTGAGGTGGCTAAGCGGGTGGGACCTTCAATCCCGTGAAGAGCTTGAAGACAACATG	540
Db	599	CCCGTGAGGTGGCTTGAAGCGCGGTGGATTTTTCGCCCCGTAAGAAAGCCCTTAAGACAACATG	658
QY	541	AGGTGCCCCGAGTGTCTCAGACAATCCTTCCCAACGAGAGTGGCCGAGAGCTAACCAAG	598
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Db	719	GGGGC 723	

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LOCUS				
CZ990230				

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DEFINITION	207384 tomato MboI BAC library Lycopersicon esculentum genomic clone SL_MboI0111C05 5, genomic survey sequence.		
ACCESSION	CZ990303		
VERSION	CZ990303.1	GI:72341948	
KEYWORDS	GSS.		
SOURCE	Lycopersicon esculentum (Solanum lycopersicum)		
ORGANISM	Lycopersicon esculentum		
TITLE	Bukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; lamids; Solanales; Solanaceae; Solanum; Lycopersicon.		
REFERENCE	1 (bases 1 to 852)		
AUTHORS	Mueller,L.A., Bueler,R.M., Wang,Y., Tanksley,S.D., Giovannoni,J.J., Van Eck,J., and Stack,S.		
JOURNAL	BAC end sequencing from three Solanum lycopersicon libraries		
COMMENT	Unpublished (2005)		
	Other_GSSs: 207383		
	Contact: Lukas Mueller		
	Tanksley Lab, Dept. of Plant Breeding		
	Cornell University		
	251 Emerson Hall, Ithaca, NY 14853, USA		
	Tel: 607-255-6557		
	Fax: 607-255-6683		
	Email: sgn-feedback@sgn.cornell.edu		
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	Seq primer: T7		
	Class: BAC ends		
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Db	119	TGGGGCTCATCAGGGCTCATATGCCAGCAGACAAAGGGGCTTTGGGATGCATATCACCA	178
Qy	62	GCTTGACCGGCGGGGACAAAAACAGGTGAGGGTGAAGTTCAAGTCGTGCAACTGCTG	121
Db	179	GCTTGACCGGCGGGGACAAAGAACAGGTGAGGGTGAAGTTCAAGTTGTGTCAACTGCG	238
Qy	122	CCAGACTTTCTTGGCAAACCTGATTAACGGGGGTGTGTGGACTGTCTTACCATGAGCGG	181
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Db	Accession	Source	Organism	Reference Authors	Title Journal Comment
Db	299	GAAACAAGACCATCGCGTACACCAAGGCTCTGTTATCATCAATGTACACCAATGTGACAC	358		
Qy	242	AAGACTGTGAGGTGCGCCCGCTCCCAAGGTGCCGCTCATTTAAACACCATGACTTGGC	301		
Db	359	AAGACTGTGAGGTGCGCCCGCTCCCAAGGTGCCGCTCATTTAAACACCTGACTTGGC	418		
Qy	302	GCTCTCGGACCTTTACTGTGTCACAGAGCAACGCGATGTATTCGTGTGGCGCGACGGG	361		
Db	419	GCTCTCGGACCTTTACTGTGTCACAGAGCAACGCGATGTATTCGTGTGGCGCGCGG	478		
Qy	362	GTGATGAGGAGGGGACGCTGTGCTTGGCCCCGACCTATCTTACTTGAAGAGCTCTGG	421		
Db	479	GTGACATATATAGGACATCTGCTCTGCGCCCGGCTATCTTACTTGAAGAGCTCTGG	538		
Qy	422	GAGCGCTCTGTGCTGTGCCCCGACG 446			
Db	539	GAGCGCTCTGTGCTGTGCCCCGACG 563			
RESULT 5					
LOCUS	C2990242	817 bp DNA linear GSS 11-AUG-2005			
DEFINITION	207300 Tomato Mboi BAC library Lycopersicon esculentum genomic clone SL_Mboi0131A11 5, genomic survey sequence.				
ACCESSION	C2990242				
VERSION	C2990242.1	GI:72341887			
KEYWORDS	GSS.				
SOURCE	Lycopersicon esculentum (Solanum lycopersicum)				
ORGANISM	Lycopersicon esculentum Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; lamiales; Solanales; Solanaceae; Solanum; Lycopersicon.				
REFERENCE	Mueller,L.A., Bueler,R.M., Wang,Y., Tanksley,S.D., Giovannoni,J.J., Van Eck,J. and Stack,S.				
AUTHORS	BAC end sequencing from three Solanum lycopersicon libraries				
TITLE	Unpublished (2005)				
JOURNAL	Other_GSSs: 207299				
COMMENT	Contact: Lukas Mueller Tanksley Lab, Dept. of Plant Breeding Cornell University 251 Emerson Hall, Ithaca, NY 14853, USA Tel: 607-255-6657 Fax: 607-255-6683 Email: sgn-feedback@sgn.cornell.edu Plate: 131 row: A column: 11 Seq primer: T7 Class: BAC ends High quality sequence start: 5 High quality sequence stop: 420. Location/Qualifiers				
FEATURES					
source	1..817				
	/organism="Lycopersicon esculentum"				
	/mol_type="genomic DNA"				
	/cultivar="Heinz 1705"				
	/db_xref="taxon:4081"				
	/clone="SL_Mboi0131A11"				
	/lab_host="E. coli"				
	/clone_lib="Tomato Mboi BAC library"				
	/note="Vector: pBelobAC11; Site_1: MboI"				
ORIGIN					
Query Match	18.2%; Score 374.2; DB 10; Length 817;				
Best Local Similarity	87.5%; Pred. No. 2,5e-92;				
Matches	421; Conservative 0; Mismatches 58; Indels 2; Gaps 1;				
Qy	2	TGGCGCTATCAAGGCTATATGCCAGACAGACAGAGGGGCTTTTGGAGATGATATACCA	61		
Db	82	TGGCGCCATACAGGCGTATGCCCCAGACAGAGAGGCTCTTGGGGTGACATATACCA	141		
Qy	62	GCTTACACGGCGCGGACAAACCAACGAGTGGAGCGGAGATTCAGATCGTGCACAACTGCTG	121		
Db	142	GCGTACACGGCGCGGACAAACCAACGAGTGGAGCGGAGATTCAGATCGTGCACAACTGCG	201		

FEATURES	source
ORIGIN	
Db	122 CCAGACCTTTCTTGGCAACCGCATTTAAACGGGGGTGTGGAACTGCTACCATGAGACCG 181
Db	202 CCCAGACCTTCTGAGCAACTGTATTAAACGGGGGTGTGGAACTGCTACCATGAGACCG 261
Db	182 GAACAGAACCATTTGCGCTCACTTAAGGGTCTGTATTCCAGATGTACACCAATGTGAC 241
Db	262 GAACAGAACCATTTGCGCTCACTTAAGGGTCTGTATTCCAGATGTACACCAATGTGAC 321
Db	242 AAGACCTTGTAGGTGTGGCCCGGCTTCCCAAGGTGCGCGCTCATTTAACCATGACCTTGGC 301
Db	322 AAGACCTTGTAGGTGTGGCCCGGCTTCCCAAGGTGCGCGCTCATTTAACCATGACCTTGGC 381
Db	302 GCTCTCTGGAACCTTTACTGTGTACAGAGGACCGCATATTCATTCTGTGGCGCGGACGG 361
Db	382 GCTCTCTGGAACCTTTACTGTGTACAGAGGACCGCATATTCATTCTGTGGCGCGGACGG 441
Db	442 GTGACAGACAGAGGACGACATGCTCTCTCCCTCGCTTACTTGTAAAGGGCTCTCTCG 501
Db	422 GAGGCCCTTGTGCTT--GCCCCGAGACATGCGCTGTAGGCATATTACAGAGCGCGGTATG 479
Db	502 GGGGCCCCCTGCTTACCCCTTCAGACATCCGCTGTATTATTAGAACCTTCGCTG 561
Db	480 C 480
Db	562 C 562
RESULT 6	
LOCUS	C2934124 980 bp DNA linear GSS 11-AUG-2005
DEFINITION	251577 Tomato EcorI BAC library Lycopersicon esculentum genomic clone SL_EcorI0030115 5, genomic survey sequence.
ACCESSION	C2934124
VERSION	C2934124.1 GI:72264385
KEYWORDS	GSS.
SOURCE	Lycopersicon esculentum (Solanum Lycopersicum)
ORGANISM	Lycopersicon esculentum
REFERENCE	Eukaryote; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; asterids; lamiales; Solanales; Solanaceae; Solanum; Lycopersicon.
AUTHORS	1 (bases 1 to 980) Mueller J.A., Beale, R.M., Wang, Y., Tankley, S.D., Giovannoni, J.J., Van Eck, J. and Stack, S.
TITLE	BAC end sequencing from three Solanum Lycopersicon libraries
JOURNAL	Unpublished (2005)
COMMENT	Other GSSs: 251576 Contact: Lukas Mueller Tankley Lab, Dept. of Plant Breeding Cornell University 251 Emerson Hall, Ithaca, NY 14853, USA Tel: 607-255-6557 Fax: 607-255-6683 Email: sgn-feedback@sgn.cornell.edu Plate: 30 row: 1 column: 15 Seq primer: T7 Class: BAC ends High quality sequence start: 23 High quality sequence stop: 485. Location/Qualifiers 1..980 /organism="Lycopersicon esculentum" /mol_type="genomic DNA" /cultivar="Heinz 1706" /db_xref="taxon:4081" /clone="SL_EcorI0030115" /lab_host="E. coli" /clone_lib="Tomato EcorI BAC Library" /note="Vector: unk; Site_1: EcorI"

Query Match 12.7%; Score 261.4; DB 10; Length 980;  
 Best Local Similarity 74.1%; Pred. No. 6, 1e-61;  
 Matches 370; Conservative 0; Mismatches 126; Indels 3; Gaps 3;

QY 2 TGGCCCTATACAGGCGCTATGCCAGACAGAAAGGGCCCTTTGGAGTCATATACCA 61  
 DB 120 TGGCCCGCATCAGGCTTACTCCCAACAGACCGGGGCTTACTGTGTATCATCACTA 179  
 QY 62 GCTTACCGGGCGGGACAAAACAGGTGAGGTGTAGATCGGTGCACTGCG 121  
 DB 180 GCTTACAGGGCGGGACAAAGACAGGTGAGGGAGGTTCAGTGTCTCACCTGCGA 239  
 QY 122 CCCAGACTTTCTGGCAACTGCAATTAAAGGGGTGTGTGACTGTCTACATGAGCG 181  
 DB 240 CGCAATCTCTCTGGGACCTGTGTCAAGGGGTGTGTGACTGTCTTCCATGGCGCG 299  
 QY 182 GAACAGAGACATTTGGTCACTTAAGGTCTGTATTCCAGATGTACACCAATGTGAGC 241  
 DB 300 GCTCAAAAGACCTTACCGGCGCAAAAGGCCCAATCACCCAAATGTACACCAATGTAGAC 359  
 QY 242 AAGACCTGTAGGCTGGCGCGCGCTCCCAAGGTGCGCGCTCATTAACACCATGACTTGG 301  
 DB 360 AAGACCTGTGGCTGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 419  
 QY 302 GCTCTCGGACCTTATCTGTACAGAGGACAGCGCATTCCTGTGCGCGACGCG 361  
 DB 420 GCACTCTCGGACCTTATCTGTGTACAGAGGACAGCGCATTCCTGTGCGCGCGCG 479  
 QY 362 GTGATGGACGGGGACGCGCTGTTTGGCGCGCGCGCTATCTTACTTGAAGGCTCTCG 420  
 DB 480 GCGACAGACATGGGGAGCTTATCTATCCCGATGCCGCTCTCTACTGTGAAGGACTCTTC 539  
 QY 421 GGAGG-CCCTGTGTGTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 478  
 DB 540 GTGTGTCCACGTCTGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 599  
 QY 479 GCACCCGTGAGTGGCTTA 497  
 DB 600 GCTCTGTGTGCTCTTA 618

RESULT 7 891 bp DNA linear GSS 11-AUG-2005  
 C2990535  
 LOCUS 207704 Tomato MboI BAC library Lycopersicon esculentum genomic  
 DEFINITION clone SL\_MboI0131121 5, genomic survey sequence.  
 ACCESSION C2990535  
 VERSION C2990535.1 GI:72342180  
 KEYWORDS GSS.  
 SOURCE Lycopersicon esculentum (Solanum lycopersicum)  
 ORGANISM Lycopersicon esculentum  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;  
 asterids; lamiales; Solanales; Solanaceae; Solanum; Lycopersicon.  
 1 (bases 1 to 891)  
 AUTHORS Mueller,L.A., Bueler,R.M., Wang,Y., Tanksey,S.D., Giovannoni,J.J.,  
 Van Eck,J. and Stack,S.  
 TITLE BAC end sequencing from three Solanum lycopersicon libraries  
 JOURNAL Unpublished (2005)  
 COMMENT Other GSSs: 207703  
 Contact: Lukas Mueller  
 Tanksley Lab, Dept. of Plant Breeding  
 Cornell University, Ithaca, NY 14853, USA  
 Tel: 607-255-6557  
 Fax: 607-255-6683  
 Email: sgn-feedback@sgn.cornell.edu  
 Plate: 131 row: 1 column: 21  
 Seg primer: 17  
 Claes: BAC ends  
 High quality sequence start: 39  
 High quality sequence stop: 261.  
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 Location/Qualifiers

source 1..891  
 /organism="Lycopersicon esculentum"  
 /mol\_type="genomic DNA"  
 /cultivar="Heinz 1706"  
 /db\_xref="taxon:4081"  
 /clone="SL\_MboI0131121"  
 /lab\_host="E. coli"  
 /clone\_11b="Tomato MboI BAC library"  
 /note="Vector: pBelobAC11, Site\_1: MboI"

Query Match 8.3%; Score 170.4; DB 10; Length 891;  
 Best Local Similarity 87.9%; Pred. No. 1, 2e-35;  
 Matches 197; Conservative 0; Mismatches 26; Indels 1; Gaps 1;

QY 2 TGGCCCTATACAGGCGCTATGCCAGACAGAAAGGGCCCTTTGGAGTCATATACCA 61  
 DB 99 TGGCCCGCATCAGGCGCTATGCCAGACAGAGGGGCTTGGGGTGCAATTAATACCA 158  
 QY 62 GCTTACCGGGCGGGACAAAACAGGTGAGGTGTAGATCGGTGCACTGCTG 121  
 DB 159 GCTTACCGGGCGGGACAAAGACAGGTGAGGGAGGTTCATATTGTCTACTGCG 218  
 QY 122 CCCAGACTTTCTGGCAACTGCAATTAAAGGGGTGTGTGACTGTCTACATGAGCG 181  
 DB 219 CCCAGACTTCTGGCAACTGTATTAAAGGGGTGTGTGACGCTTACACGAGGGCGCG 278  
 QY 182 GAACAGAGACCAT-TGCGTCACTTAAGGCTCTGTATTACCAT 224  
 DB 279 GAACAGAGATTATCTCTATCACCCCAACGCTCTGTATTACCAT 322

RESULT 8 922 bp DNA linear GSS 11-AUG-2005  
 C2990744  
 LOCUS 207968 Tomato MboI BAC library Lycopersicon esculentum genomic  
 DEFINITION clone SL\_MboI0131009 5, genomic survey sequence.  
 ACCESSION C2990744  
 VERSION C2990744.1 GI:72342389  
 KEYWORDS GSS.  
 SOURCE Lycopersicon esculentum (Solanum lycopersicum)  
 ORGANISM Lycopersicon esculentum  
 Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;  
 Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons;  
 asterids; lamiales; Solanales; Solanaceae; Solanum; Lycopersicon.  
 1 (bases 1 to 922)  
 AUTHORS Mueller,L.A., Bueler,R.M., Wang,Y., Tanksey,S.D., Giovannoni,J.J.,  
 Van Eck,J. and Stack,S.  
 TITLE BAC end sequencing from three Solanum lycopersicon libraries  
 JOURNAL Unpublished (2005)  
 COMMENT Other GSSs: 207967  
 Contact: Lukas Mueller  
 Tanksley Lab, Dept. of Plant Breeding  
 Cornell University  
 251 Emerson Hall, Ithaca, NY 14853, USA  
 Tel: 607-255-6557  
 Fax: 607-255-6683  
 Email: sgn-feedback@sgn.cornell.edu  
 Plate: 131 row: 0 column: 9  
 Seg primer: 17  
 Claes: BAC ends  
 High quality sequence start: 48  
 High quality sequence stop: 274.  
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 source 1..922  
 /organism="Lycopersicon esculentum"  
 /mol\_type="genomic DNA"  
 /cultivar="Heinz 1706"  
 /db\_xref="taxon:4081"  
 /clone="SL\_MboI0131009"  
 /lab\_host="E. coli"  
 /clone\_11b="Tomato MboI BAC library"  
 /note="Vector: pBelobAC11, Site\_1: MboI"

ORIGIN	Query Match	6.9%	Score 142.4	DB 10	Length 922
	Best Local Similarity	76.6%	Pred. No. 7.4e-28		
	Matches 187	Conservative	0	Mismatches 56	Indels 1
				Gaps	1
Qy	2	TGGCGCCATGACGCGCTATGCTCCGACGAGAAAGGGGCTTTTGGATGATTAATCA	61		
Db	107	TTGGCGCCATGACGCGCTTACTCTCCAGCAGACCGCGGGCTACTGGCTGATCATCA	166		
Qy	62	GCTTGACCGCGCGGACAAAAACGAGTGAAGGTGAGGTTCAATCGTCAACTGCTG	121		
Db	167	GCCTCACAGCGCGGGACAAAGAACGAGTGCAGGGGGAGTTCAAGTGGTTGCACCGGA	226		
Qy	122	CCGAGACTTTTGGCAACCTCGCATTAACGGGGGTGTGGACATGTCTACCATGAGCGC	181		
Db	227	CACAGTCTTCTTCTGGCCACCTGCGCATGAGCGGTGTGTGACATGTCTACCATGGGCGC	286		
Qy	182	GACACGAGACCATGCGCTGACCTTAAGGCTCTGTTAT-CCAGATGTACCAATGTGAC	240		
Db	287	GCTCAAGAACCTTAGCGCGCGCGGATGGCCCAATCATCCAGTTGTACAAACGTGTATTA	346		
Qy	241	CAAG 244			
Db	347	CCAG 350			
RESULT 9	CL252974/c	509 bp	DNA	linear	GSS 28-JAN-2004
LOCUS	ZMMBB0601011r ZMMBBb (HindIII)				Zea mays genomic clone
DEFINITION	ZMMBB0601011 3', genomic survey sequence.				
ACCESSION	CL252974				
VERSION	CL252974.1				
KEYWORDS	GSS.				
SOURCE	Zea mays				
ORGANISM	Zea mays				
REFERENCE	Eukaryota, Viridiplantae, Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.				
AUTHORS	1 (bases 1 to 509) Bharti,A.K., Young,S., Kavchok,S., Keizer,G., Bronzino,A.C., Zolovetz,V., Puke,G., Yu,Y., Wing,R. and Messing,J.				
TITLE	Sequencing of the maize genome at PGR (2003c)				
JOURNAL	Unpublished (2003)				
COMMENT	Contact: Bharti,A.K. Dr.Joachim Messing's lab The Plant Genome Initiative at Rutgers, Waksman Institute, Rutgers University 190 Frelinghuysen Road, Piscataway, NJ 08854, USA Tel: 732 445 3801 Fax: 732 445 5735 Email: bharti@waksman.rutgers.edu Seq primer: SP6 Class: BAC ends High quality sequence start: 73. Location/Qualifiers 1..509 /organism="Zea mays" /mol type="genomic DNA" /cultivar="B73" /db_xref="taxon:4577" /clone="ZMMBB0601011" /lab host="E. coli DH108" /clone_id="ZMMBBb (HindIII)" /note="Vector: pCUGI; Site_1: HindIII; Site_2: HindIII"				
ORIGIN	Query Match	2.3%	Score 46.8	DB 10	Length 509
	Best Local Similarity	50.4%	Pred. No. 0.24		
	Matches 114	Conservative	0	Mismatches 112	Indels 0
				Gaps	0
Qy	1147	GTCGCGTTGGCGGCGTAATGCGGTGCTTACTACCGCGCGCTTGATGTGCTCATCCCG	1206		

Db	Accession	Version	KeyWords	Organism	Reference	Authors	Title	Journal	Comment	Features	Source	Origin	Query Match	Best Local Similarity	Matches	Conservative	Score	DB	Length	Mismatches	Indels	Gaps
Db	406	GTCTCGGAGCCCTTGCGCGCGTGCATCTCACCCCTTGTCGTGCTGTCATCTCATCTC	347																			
Qy	1207	ACCAAGTGTACCGTTGCTGCTGTGGCAACTGACGCCCTTACAGACCGGCTTACCGCGAC	126																			
Db	346	GCCCTTGCGCGTCACTGTTGTGCCATATGCTGCGCCCTGCGCGTGCATTCACCTCGCC	287																			
Qy	1267	TTTCATTCGCGATAGACTGCACACAGCTGTGTACCCAGACAGTGCATCTTCAGCCTTGAC	132																			
Db	286	GTTCGCCACCTTGCGCGCTGCGCGTGCATCGCCGCCACCGCCGCTTGCGCGTGTGTGTGT	227																			
Qy	1327	CTTACCTTACCATTTAGACATCAACGCTTCCCGAGATGCTGTCT	1372																			
Db	226	GCTGCGCGTGTGCTGCGCGCATCACTCGCGCACTGCTCCACTCT	181																			
RESULT 10																						
LOCUS	CNS006XK/																					
DEFINITION	CNS006XK	935 bp	DNA	linear	GSS 03-JUN-1999																	
ACCESSION	Drosophila melanogaster genome survey sequence T7 end of BAC #																					
VERSION	BACR1AN09 of RPci-98 library from Drosophila melanogaster (fruit																					
KEYWORDS	fly), genomic survey sequence.																					
SOURCE	AL066051																					
ORGANISM	AL066051.1	GI:4945019																				
REFERENCE	GSS.																					
AUTHORS	Drosophila melanogaster (fruit fly)																					
TITLE	Drosophila melanogaster																					
JOURNAL	Eukaryota, Metazoa, Arthropoda, Hexapoda, Insecta, Pterygota, Neoptera, Endopterygota, Diptera, Brachycera, Muscomorpha, Ephydroidae, Drosophilidae, Drosophila.																					
COMMENT	1 (bases 1 to 935)																					
	Genoscope.																					
	Direct Submission																					
	Submitted (02-JUN-1999) Genoscope - Centre National de Sequencage																					
	BP 191 91006 EVRY cedex - FRANCE (E-mail : sequef@genoscope.cns.fr																					
	- web : www.genoscope.cns.fr)																					
	Determination of this BAC-end sequence was carried out as part of a																					
	collaboration with the Berkeley Drosophila Genome Project (BDGP).																					
	The BDGP is constructing a physical map of the Drosophila																					
	melanogaster genome using these BACs. For further information																					
	please see http://www.fruitfly.org The BDGP Drosophila																					
	melanogaster BAC library was prepared by Kazutyo Osoegawa and																					
	Aaron Mammoler in Pieter de Jong's laboratory in the Department of																					
	Cancer Genetics at the Roswell Park Cancer																					



/note="Organ: brain; Vector: pYX-Aac; Site 1: Ecor I; Site 2: Not I; The library was constructed according to Bonaldo, Lemmon and Soares, Genome Research, 6:791-806, 1996. Denatured mRNA was size fractionated on a 1% agarose gel. First strand cDNA synthesis was primed with an oligo-dT primer containing a Not I site. Double stranded cDNA was size selected according to mRNA size fraction, ligated with Ecor I adaptor, digested with Not I, and then cloned directionally into pYX-Aac vector. The library tag sequence located between the Not I site and the polyA tail, is CAGCCACGAC. This library was created for the University of Iowa Mouse Brain Molecular Anatomy Project (BMAP): 'Gene Discovery in the Developing Mouse Nervous System', supported by National Institute of Mental Health (NIMH), Hemin Chin, Ph.D., program coordinator."

## ORIGIN

Query Match 2.1%; Score 43.4; DB 3; Length 666;  
Best Local Similarity 53.9%; Pred. No. 2.3;  
Matches 89; Conservative 0; Mismatches 76; Indels 0; Gaps 0;

QY 687 CAACCCCTTCGTTGCTGCAACATGGGCTTTGCTTACATGTCACAGCCCATGGAT 746  
DB 624 CAAGGCCACTGTGCTGGAGCATTGGCTCTCAGTGTCTGCTCAGAGCCACAGGCT 565  
QY 747 TGAATCTACATCAGAGCTGGGCTGAGGCAATTACTAGGACGCCATACGTAATTC 806  
DB 564 GGACACAAAGGGGAGCTCTCGGCTGAGGCAAGTTCACAGGACGCTGGGATAGTGCC 505  
QY 807 CACTACGCGCAAGTTCCTTCCGACGCGCGGTGTTCAGGCGGTGC 851  
DB 504 CGGCTCTGAGAGAGCTGCAGCGCCGCGGTGGAGTTACGTAGGC 460

RESULT 13  
LOCUS CX661874 793 bp mRNA linear EST 18-JAN-2005  
DEFINITION V01011F01\_559192 Fragaria vesca heat stressed seedlings cDNA library in pCMV-SPORT 6.1 Fragaria vesca cDNA clone V01011F01 3, mRNA sequence.

ACCESSION CX661874  
VERSION CX661874  
KEYWORDS CX661874.1 GI:57896117  
SOURCE EST.  
ORGANISM Fragaria vesca  
Fragaria vesca  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Rosales; Rosaceae; Rosoideae; Fragaria.  
1 (bases 1 to 793)  
Shulaev, V. and Slovin, J.  
Fragaria vesca EST database (FVdbEST): A tool for strawberry functional genomics  
Unpublished (2004)  
Contact: Shulaev V  
Shulaev's Lab

REFERENCE  
AUTHORS VBI  
TITLE Bioinformatics I, Washington Street, Virginia Bioinformatics Institute, Blacksburg, VA 24061, USA  
JOURNAL  
COMMENT Tel: 1-540-231-3489  
Fax: 1-540-231-2606  
Email: vshulaev@vbi.vt.edu  
PCR Primers  
FORWARD: M13 forward at 5' end  
BACKWARD: M13 reverse 17mer at 3' end  
Plate: 011 row: F column: 01  
Seq primer: M13 reverse 17mer at 3' end  
High quality sequence stop: 793.

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source location/Qualifiers  
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/organism="Fragaria vesca"  
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/clone="V01011F01"

## ORIGIN

Query Match 2.1%; Score 43.4; DB 8; Length 793;  
Best Local Similarity 50.7%; Pred. No. 2.4;  
Matches 104; Conservative 0; Mismatches 101; Indels 0; Gaps 0;

/dev starge="seedlings"  
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/note="Vector: pCMV-SPORT6.1; Site 1: NotI; Site 2: EcorV; (Adopted from the Invitrogen product manual) Custom cDNA library pCMV-SPORT6.1 is prepared as follows: mRNA is isolated using two steps. First, total RNA is isolated from tissues or cells using the TRIzol Reagent. Second, mRNA is isolated from total RNA using oligo (dT) in a filter syringe. First-strand cDNA is synthesized using SuperScript III Reverse Transcriptase. Second-strand cDNA is synthesized using E. coli RNase H, E. coli DNA polymerase I, and E. coli DNA ligase. cDNA is blunt-ended using T4 DNA polymerase and digested with Not I. cDNA is size-selected using column chromatography or agarose gel electrophoresis. Size-selected cDNA is directionally cloned into the Not I-Ecor V region of the vector (Ecor V site is destroyed during cloning). Ligation mixture is transformed into competent DH10B T1-Phase Resistant E. coli and the number of primary recombinants is determined"

QY 1160 TCAATGCCGTGCTTACACCGGCTTGTATGTCCGTATCCCGACCACTGTGACG 1219  
DB 428 TCGAGCGCGCCCGGAGAGACGCGCGTGATACATCAACCGCCACCGCTGAGT 487  
QY 1220 TTGTGCTGTGGCAACTGACGCGCTCATGACGCGCTTACGCGCACTTGTGATG 1279  
DB 488 ACGAGACCGAAGCGCCGCACTACGCGCACTGATGCGCCGCGCAACCGCATTAAGTCA 547  
QY 1280 TAGACTGCAACGCTGTGTCAACCGACAGTGTGACTTACGCTTACCTTACCA 1339  
DB 548 AGAATCATGATACCGCGCGCGCGGATGAGAGCGGCATCTCTGTGCTCGGCGCG 607  
QY 1340 TTGACACATACCGCTTCCCGAGA 1364  
DB 608 ACGGCCAATGCGCGGACGACCAAGA 632

RESULT 14  
LOCUS CX661332 860 bp mRNA linear EST 18-JAN-2005  
DEFINITION V01014A08\_558094 Fragaria vesca heat stressed seedlings cDNA library in pCMV-SPORT 6.1 Fragaria vesca cDNA clone V01014A08 3, mRNA sequence.

ACCESSION CX661332  
VERSION CX661332  
KEYWORDS CX661332.1 GI:57895575  
SOURCE EST.  
ORGANISM Fragaria vesca  
Fragaria vesca  
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; eudicotyledons; core eudicotyledons; rosids; eurosids I; Rosales; Rosaceae; Rosoideae; Fragaria.  
1 (bases 1 to 860)  
Shulaev, V. and Slovin, J.  
Fragaria vesca EST database (FVdbEST): A tool for strawberry functional genomics  
Unpublished (2004)  
Contact: Shulaev V  
Shulaev's Lab

REFERENCE  
AUTHORS VBI  
TITLE Bioinformatics I, Washington Street, Virginia Bioinformatics Institute, Blacksburg, VA 24061, USA  
JOURNAL  
COMMENT Tel: 1-540-231-3489  
Fax: 1-540-231-2606  
Email: vshulaev@vbi.vt.edu  
PCR Primers  
FORWARD: M13 forward at 5' end  
BACKWARD: M13 reverse 17mer at 3' end

Plate: 014 row: A column: 08  
Seq primer: M13 reverse 17mer at 3' end  
High quality sequence stop: 860.  
Location/Qualifiers

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/note="Vector: PCMV-SPORT6.1; Site 1: NotI; Site 2: EcoRV; (Adopted from the Invitrogen product manual) Custom cDNA library PCMV-SPORT6.1 is prepared as follows: mRNA is isolated using two steps. First, total RNA is isolated from tissues or cells using the TRIzol Reagent. Second, mRNA is isolated from total RNA using oligo (dT) in a filter syringe. First-strand cDNA is synthesized using SuperScript III Reverse Transcriptase. Second-strand cDNA is synthesized using E. coli Phase H, E. coli DNA polymerase I, and E. coli DNA ligase. cDNA is blunt-ended using T4 DNA Polymerase and digested with Not I. cDNA is size-selected using column chromatography or agarose gel electrophoresis. Size-selected cDNA is directionally cloned into the Not I-EcoR V region of the vector (EcoR V site is destroyed during cloning). Ligation mixture is transformed into competent DH10B TI-Phage Resistant E. coli and the number of primary recombinants is determined"

## ORIGIN

Query Match 2.1%; Score 43.4; DB 8; Length 860;  
Best Local Similarity 50.7%; Pred. No. 2.5; Mismatches 101; Indels 0; Gaps 0;

Matches 104; Conservative 0; Mismatches 101; Indels 0; Gaps 0;

QY 1160 TCAATGCGGTGCTTACTACCGCGCTTGATGTCTCCATCCCGACAGTGTGACG 1219  
DB 461 TCGACGCGCGCGCGAGAGAGCGCGCGGATCAACATCAACCGCACCGTCGAGT 520  
QY 1220 TTGTGTGTGTGCAACTGACGCGCTTCATGACCGGCTTTACCGGCACTTCGATTCGGTGA 1279  
DB 521 ACGAGACCGAGAGCGCCACTACGCGCCCACTGACGCGCGCCGCGCATTAACGTCA 580  
QY 1280 TAGACTGCACACGATGTGACCGACAGACAGTCACTTACGCTTACCGCTTACCTTACCA 1339  
DB 581 AGAATATGATTCACCGCGCGCGCGCGCGATGAGACGCGCCATCTCTGTCTCGCGCGCG 640  
QY 1340 TTGAGACATCAACGCTTCCCGCAGA 1364  
DB 641 ACGGCCCAATGCGCGAGACCAAGA 665

RESULT 15  
CV068974 1863 bp mRNA linear EST 24-AUG-2004  
LOCUS CV068974/C  
DEFINITION f2\_new\_chopped.fasta.Contig672 Preamplified custom cDNA library in PCMVSPORT6.1 (ResGen, Invitrogen Inc.) Emiliaia huxleyi cDNA, mRNA  
Sequence.

ACCESSION CV068974 GI:51532138

VERSION CV068974  
KEYWORDS  
SOURCE EST.

ORGANISM Emiliaia huxleyi  
Eukaryota; Haptophyceae; Isochrysidales; Emiliaia.

REFERENCE 1 (bases 1 to 1863)  
Wahlund, T.W., Zhang, X. and Read, B.A.  
Expressed Sequence Tag Profiles from Calcifying and Non-calcifying  
Cultures of Emiliaia huxleyi  
Micropaleontology (2004) In press

JOURNAL  
COMMENT Contact: Betsy Read  
Department of Biological Sciences  
California State University San Marcos  
333 S. Twin Oaks Valley Road, San Marcos, CA 92096-0001, USA

Tel: 760 750 4129  
Email: bread@csu.edu.  
Location/Qualifiers

## FEATURES

source

1. 1863  
/organism="Emiliaia huxleyi"  
/mol\_type="mRNA"  
/strain="1516"  
/db\_xref="taxon:2903"  
/dev\_stage="late log growth phase"  
/clone\_1lb="Preamplified custom cDNA library in PCMVSPORT6.1 (ResGen, Invitrogen Inc.)"  
/note="Emiliaia huxleyi grown in Artificial Seawater (Guillard's F/2 media)."

## ORIGIN

Query Match 2.1%; Score 42.8; DB 7; Length 1863;  
Best Local Similarity 48.4%; Pred. No. 4.5; Mismatches 119; Conservative 0; Mismatches 127; Indels 0; Gaps 0;

Matches 119; Conservative 0; Mismatches 127; Indels 0; Gaps 0;

QY 1126 GACGAGCTGCGCGCAAACTGGTGCCTTGGGCGTCAATGCGGTGCTTACTACCGCGGC 1185  
DB 1523 GACGCCACAGGCGCCATGACCGCGCACCCCTGCTTCAATAGCGGCCCTCCCTCCATTGCC 1464  
QY 1186 CTGATGTGTCTCGTCATCCGACCAAGTGTGACGTTGTCTGTGCAACTGACCGCCTTC 1245  
DB 1463 GCGGCGCTTACCGGCTTCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCTTC 1404  
QY 1246 ATGACCGGCTTACCGGCGGACTTGGATTTGATGACTGACACAGTGTGACCGCAG 1305  
DB 1403 AAGCCACCTTCCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCTTT 1344  
QY 1306 AAGTGCATTCAGCGCTTACCGCTTACCGCTTACCGCTTACCGCTTACCGCTTACCGCTT 1365  
DB 1343 GTGCGCGCGCTTCCCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 1284  
QY 1366 GCTGTC 1371  
DB 1283 TCTGAC 1278

Search completed: February 7, 2006, 22:42:58  
Job time : 8384 secs

1000 (1000)



GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:14:06 ; Search time 392 Seconds  
(without alignment)  
9345.802 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061

Sequence: 1 atggcgctatcacgcgcta.....atgaatggaagtgctgta 2061

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 1303057 seqs, 888780828 residues

Total number of hits satisfying chosen parameters: 2606114

Minimum DB seq length: 0

Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Listing first 45 summaries

Database : Issued Patents NA:\*

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2: /cgn2\_6/ptodata/1/ina/5\_COMB.seq:\*  
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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

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1	2061	100.0	2061	3	US-09-929-955-16
2	2061	100.0	2061	3	US-09-930-591-16
3	1786	86.7	7310	3	US-08-444-818-74
4	1786	86.7	9379	3	US-09-388-874-1
5	1786	86.7	9379	3	US-09-916-359-1
6	1786	86.7	9401	2	US-07-910-760-9
7	1786	86.7	9401	2	US-08-440-519-9
8	1786	86.7	9401	3	US-08-440-549-9
9	1786	86.7	9401	3	US-08-823-895A-25
10	1785.2	86.6	9401	6	PCT-US91-02225-9
11	1784.4	86.6	6785	3	US-08-444-818-65
12	1784.4	86.6	8316	3	US-08-444-818-88
13	1784.4	86.6	8987	3	US-08-444-818-117
14	1784.4	86.6	9185	3	US-08-444-818-122
15	1784.4	86.6	9185	3	US-08-444-818-123
16	1784.4	86.6	9379	3	US-08-444-818-116
17	1781.2	86.4	2058	3	US-09-881-239-2
18	1781.2	86.4	5360	3	US-08-444-818-53
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22	1774.8	86.1	12980	3	US-09-034-756-5
23	1773.2	86.0	9646	3	US-08-811-566-1
24	1773.2	86.0	9646	3	US-09-034-756-1

25	1765.2	85.6	9599	3	US-09-014-416-2	Sequence 2, Appl1
26	1765.2	85.6	9599	3	US-09-014-416-6	Sequence 6, Appl1
27	1765.2	85.6	10803	3	US-10-259-275-17	Sequence 17, Appl1
28	1762	85.5	9416	3	US-08-823-895A-26	Sequence 26, Appl1
29	1762	85.5	9416	3	US-10-104-966-13	Sequence 13, Appl1
30	1762	85.5	9416	3	US-09-929-955-13	Sequence 13, Appl1
31	1750.8	84.9	9401	2	US-08-433-693-1	Sequence 1, Appl1
32	1750.8	84.9	9416	3	US-08-811-566-19	Sequence 19, Appl1
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34	1749.2	84.9	9365	3	US-09-827-668-7	Sequence 7, Appl1
35	1557.8	75.6	2064	2	US-08-350-884-69	Sequence 69, Appl1
36	1557.8	75.6	2064	2	US-08-440-548-69	Sequence 69, Appl1
37	1557.8	75.6	2064	2	US-08-709-173-69	Sequence 69, Appl1
38	1557.8	75.6	2064	2	US-08-709-173-69	Sequence 69, Appl1
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44	1546	75.0	8157	3	US-09-128-314-3	Sequence 3, Appl1
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## ALIGNMENTS

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RESULT 1
US-09-929-955-16
; Sequence 16, Application US/0929955
; Patent No. 6858590
; GENERAL INFORMATION:
; APPLICANT: Matci Salberg
; APPLICANT: Catharina Hulgren
; TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND
; FILE REFERENCE: TRIPEP.23AUS2
; CURRENT APPLICATION NUMBER: US/09/929,955
; PRIOR FILING DATE: 2001-08-15
; PRIOR APPLICATION NUMBER: 09/705,547
; PRIOR FILING DATE: 2000-11-03
; PRIOR APPLICATION NUMBER: 60/229,175
; PRIOR FILING DATE: 2000-08-29
; PRIOR APPLICATION NUMBER: 60/225,767
; PRIOR FILING DATE: 2000-08-17
; NUMBER OF SEQ ID NOS: 49
; SOFTWARE: FASTSEQ for Windows Version 4.0
; SEQ ID NO 16
; LENGTH: 2061
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Hepatitis C virus NS3/4A coding region
US-09-929-955-16
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Beer Local Similarity 100.0%; Pred. No. 0;
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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/ LENGTH: 2061  
/ TYPE: DNA  
/ ORGANISM: Artificial Sequence  
/ FEATURE:  
/ OTHER INFORMATION: Hepatitis C virus NS3/4A coding region  
us-09-930-591-1

Query Match 100.0%; Score 2061; DB 3; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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QY 1861 ATGACATGATATGTGCGCTGACCTGAGAGTCTGTACAGATACCTGGGTCTGTTGGCGGC 1920
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QY 1921 GTTCTGCTGCTTTGGCGCGGATATGCTTATCCACAGGCTCGTGTATAGTATAGT 1980
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QY 2041 GATGAATGAGAGTGTGA 2061  
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RESULT 3  
US-08-444-818-74

/ Sequence 74, Application US/08444818  
/ Patent No. 6150087  
/ GENERAL INFORMATION:  
/ APPLICANT: Chien, David Y.  
/ APPLICANT: Rutter, William J.  
/ TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
/ NUMBER OF SEQUENCES: 777  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Chiron Corporation  
/ STREET: 4560 Horton Street  
/ CITY: Emeryville  
/ STATE: CA  
/ COUNTRY: USA  
/ ZIP: 94608-2916  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/444,818  
/ FILING DATE:  
/ CLASSIFICATION: 424  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/403,590  
/ FILING DATE: 14-MAR-1995  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Harbin, Alisa A.  
/ REGISTRATION NUMBER: 33,895  
/ REFERENCE/DOCKET NUMBER: 0110,002  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: (508)359-3876  
/ TELEFAX: (508)359-3885  
/ INFORMATION FOR SEQ ID NO: 74:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 7310 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single  
/ TOPOLOGY: linear  
/ MOLECULE TYPE: cDNA  
/ FEATURE:  
/ NAME/KEY: CDS  
/ LOCATION: 3..7310  
/ US-08-444-818-74

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Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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QY 182 GAAACAAGACCTTGGCTGACCTAAGAGGTCTGTATTCAGATGTACCAATGTGAGCC 241  
Db 1909 GAAACAAGACCTTGGCTGACCTAAGAGGTCTGTATTCAGATGTACCAATGTGAGCC 1968

QY 242 AAGACTGTAGCTGACCGCCGCTCCCAAGGTCGCCGCTCAATTAACCATGCACTTGC 301  
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QY 302 GCTCTCGGACCTTTACCTGTCACAGAGCAAGCCGATGTCTATTCCTGTGCGGACGAG 361  
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Db 2209 CCCGTGAGTGGCTTAAGGCGGTGACCTTCAATCCCGTAGAGCTTGAAGACATGCA 2268  
QY 542 GGTCCCGGTTTCTCAGACAACTCTCCCAAGAGAGTCCCAAGCTTACCAAGTGG 601  
Db 2269 GGTCCCGGTTTCTCAGACAACTCTCTCCCAAGAGAGTCCCAAGCTTACCAAGTGG 2328  
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; Patent No. 6284249  
; GENERAL INFORMATION:  
; APPLICANT: Veronique Barban  
; TITLE OF INVENTION: VACCINE COMPOSITION FOR PREVENTING OR  
; FILE REFERENCE: PMCP97-03A  
; CURRENT APPLICATION NUMBER: US/09/388,874  
; EARLIER FILING DATE: 1999-09-02  
; EARLIER APPLICATION NUMBER: PCT/FR98/00448  
; EARLIER FILING DATE: 1998-03-06  
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; Sequence 1, Application US/09916359  
; Patent No. 6538123  
; GENERAL INFORMATION:  
; APPLICANT: Veronique Barban  
; TITLE OF INVENTION: VACCINE COMPOSITION FOR PREVENTING OR  
; FILE REFERENCE: PMCF97-03A  
; CURRENT APPLICATION NUMBER: US/09/916,359  
; PRIOR FILING DATE: 2001-07-26  
; PRIOR APPLICATION NUMBER: 09/388,874  
; PRIOR FILING DATE: 1999-09-02  
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ATTORNEY/AGENT INFORMATION:  
NAME: Blackburn Esq., Robert P.  
REGISTRATION NUMBER: 30,447  
REFERENCE/DOCKET NUMBER: 0101.002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (510) 601-2702  
TELEFAX: (510) 655-3542  
INFORMATION FOR SEQ. ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9401 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
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RESULT 8  
US-08-440-549-9  
Sequence 9, Application US/08440549  
Patent No. 6312889  
GENERAL INFORMATION:  
APPLICANT: Houghton, Michael  
APPLICANT: Cho, Qui-Lim  
APPLICANT: Kuo, George  
TITLE OF INVENTION: Combinations of Hepatitis C virus (HCV)  
NUMBER OF SEQUENCES: 12  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Chiron Corporation

STREET: P.O. Box 8097 (Int. Prop. R-440)  
CITY: Emeryville  
STATE: CA  
COUNTRY: U.S.A.  
ZIP: 94662-8097  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentn Release #1.0, Version #1.25  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/440,549  
FILING DATE: 12-MAY-1995  
CLASSIFICATION: 435  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US 07/910,760  
FILING DATE: 07-JUL-1992  
ATTORNEY/AGENT INFORMATION:  
NAME: Blackburn Esq., Robert P.  
REGISTRATION NUMBER: 30,447  
REFERENCE/DOCKET NUMBER: 0101.002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (510) 601-2702  
TELEFAX: (510) 655-3542  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9401 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: DNA (genomic)  
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US-08-440-549-9

Query Match 86.7%; Score 1786; DB 3; Length 9401;

Best Local Similarity 91.7%; Pred. No. 0;

Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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## RESULT 9

US-08-823-895A-25  
Sequence 25, Application US/08823895A

Patent No. 6433159

GENERAL INFORMATION:

APPLICANT: Kevin P. Anderson

TITLE OF INVENTION: Compositions And Methods For

TITLE OF INVENTION: Treatment Of Hepatitis C Virus-Associated Diseases

NUMBER OF SEQUENCES: 27

CORRESPONDENCE ADDRESS:

ADDRESSEE: Jane Massey Licata, Esq.

STREET: 66 E. Main Street

CITY: Marlton

STATE: NJ

COUNTRY: USA

ZIP: 08053

COMPUTER READABLE FORM:

MEDIUM TYPE: DISKETTE, 3.5 INCH, 1.44 Mb STORAGE

COMPUTER: IBM 486

OPERATING SYSTEM: WINDOWS FOR WORKGROUPS

SOFTWARE: WORDPERFECT 5.1

CURRENT APPLICATION DATA:

APPLICATION NUMBER: US/08/823,895A

FILING DATE: March 17, 1997

CLASSIFICATION: 514

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 08/453,085

FILING DATE: May 30, 1995

PRIOR APPLICATION DATA:

APPLICATION NUMBER: 07/945,289

FILING DATE: September 10, 1992

ATTORNEY/AGENT INFORMATION:

NAME: Jane Massey Licata

REGISTRATION NUMBER: 32,257

REFERENCE/DOCKET NUMBER: ISPH-0203

TELECOMMUNICATION INFORMATION:

TELEPHONE: (609) 779-2400

TELEFAX: (609) 810-1454

INFORMATION FOR SEQ ID NO: 25:

SEQUENCE CHARACTERISTICS:

LENGTH: 9401

TYPE: Nucleic

STRANDEDNESS: Single

TOPOLOGY: Linear

ANTI-SENSE: NO

US-08-823-895A-25

Query Match 86.7%; Score 1786; DB 3; Length 9401;

Best Local Similarity 91.7%; Pred. No. 0;

Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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Qy 1262 GCGACTTGATTCGGTGAATGACTGCAACAGTGTGTCAACCGACAGACTGCACTTCAAGC 1321

Db 4678 GCGACTTGATTCGGTGAATGACTGCAACAGTGTGTCAACCGACAGACTGCACTTCAAGC 4737

Qy 1332 TTGACCTTAACCTTCAATTAAGCAATCACGCTTCCCAAGAGTGTCTCCGTAATC 1381

Db 4738 TTGACCTTAACCTTCAATTAAGCAATCACGCTTCCCAAGAGTGTCTCCGTAATC 4797



1382 AACGTCGGGGTGAAGTGGCAGAGGGAAGCAGCATCTACAGATTGTGGACCGGGG 1441  
4798 AACGTCGGGGGAGAGTGGCAGAGGGAAGCAGCATCTACAGATTGTGGACCGGGG 4857  
1442 AACGTCCTTCTGGCATGTTGACTGCTGCTCTCTGCGAGTGTATGAAGCGGGTGTG 1501  
4858 AACGCCCCCTCGGCAATGTTGAGTGTGCTGCTGCTGCTGAGTGTATGACGAGGCTGTG 4917  
1502 CTTGGTATGAGCTTACGCCCCCGGAGACCAAGTATGAGTATGAGTATGAGAACCC 1561  
4918 CTTGGTATGAGCTTACGCCCCCGGAGACCAAGTATGAGTATGAGTATGAGAACCC 4977  
1562 CGGAGCTTCCGCTGAGCAGAGCATCTTGAATTTTGGAGGGCGCTTACGAGGCTCA 1621  
4978 CGGGGCTTCCGCTGAGCAGAGCATCTTGAATTTTGGAGGGCGCTTACGAGGCTCA 5037  
1622 CCACATAGACGCGCATCTTCTATCCAGACAAAGAGAGTGGGAAACCTTCCCTATC 1681  
5038 CTCAATATAGATGCCCATCTTCTATCCAGACAAAGAGAGTGGGAAACCTTCCCTATC 5097  
1682 TGGTACGCTACCAAGCAGCAGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 1741  
5098 TGGTACGCTACCAAGCAGCAGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 5157  
1742 AGATGAGAGTGTGATCGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 1801  
5158 AGATGAGAGTGTGATCGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 5217  
1802 ATAGATGAGTGTGATCGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 1861  
5218 ATAGATGAGTGTGATCGCTGCTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTGAGTGTG 5277  
1862 TACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1921  
5278 TACATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 5337  
1922 TCTGCGCTGCTTGGCGCGGTATGCTATGCAAGCGCTGCTGCTATGATGATGATGATGATG 1981  
5338 TCTGCGCTGCTTGGCGCGGTATGCTATGCAAGCGCTGCTGCTATGATGATGATGATGATG 5397  
1982 TTGCTCTTCTCGGAAAGCGGCAATCATCCGACAGAGGAGTCTCTACCGGAGTTCG 2041  
5398 TCGTCTGCTCGGAAAGCGGCAATCATCCGACAGAGGAGTCTCTACCGGAGTTCG 5457  
2042 ATGAAATGGAAGTCT 2059  
5458 ATGAGATGGAAGTCT 5475

RESULT 10  
PCT-US91-02225-9  
Sequence 9, Application PC/TUS9102225  
GENERAL INFORMATION:  
APPLICANT: HOUGHTON, MICHAEL  
APPLICANT: CHOO, QUI-LIM  
APPLICANT: KUD, GEORGE  
TITLE OF INVENTION: COMBINATIONS OF HEPATITIS C VIRUS  
TITLE OF INVENTION: ANTIBODIES  
NUMBER OF SEQUENCES: 10  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Morrison & Foerster  
STREET: 545 Middlefield Road, Suite 200  
CITY: Menlo Park  
STATE: CA  
COUNTRY: USA  
ZIP: 94025  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.25

CURRENT APPLICATION DATA:  
APPLICATION NUMBER: PCT/US91/02225  
FILING DATE: 19910329  
CLASSIFICATION: 435  
ATTORNEY/AGENT INFORMATION:  
NAME: CIOTTI, THOMAS E.  
REGISTRATION NUMBER: 21, 013  
REFERENCE/DOCKET NUMBER: 2300-0101.44  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (415) 327-7250  
TELEFAX: (415) 327-2951  
TELEX: 706141  
INFORMATION FOR SEQ ID NO: 9:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9401 base pairs  
TYPE: NUCLEIC ACID  
STRANDEDNESS: unknown  
TOPOLOGY: unknown  
MOLECULE TYPE: DNA (genomic)  
PCT-US91-02225-9

Query Match 86.6%; Score 1785.2; DB 6; Length 9401;  
Best Local Similarity 91.5%; Pred. No. 0;  
Matches 1883; Conservative 6; Mismatches 169; Indels 0; Gaps 0;

2 TGGGCGCTATACCGGCTATGCGCAGACAGAAAGGGGCTTTGGATGATATACCA 61  
3418 TGGGCGCTATACCGGCTATGCGCAGACAGAAAGGGGCTTTGGATGATATACCA 3477  
62 GCTTGACCGCGCGGAGCAAAACAGAGTGAAGTGAAGTTCAGTGTCTCACTGCTG 121  
3478 GCTTGACCGCGCGGAGCAAAACAGAGTGAAGTGAAGTTCAGTGTCTCACTGCTG 3537  
122 CCAGACTTTCTTGGCAACCTGCAATTAAGGGGTGTGATGATGATGATGATGATG 181  
3538 CCAGACTTTCTTGGCAACCTGCAATTAAGGGGTGTGATGATGATGATGATGATG 3597  
182 GAAAGAGAGCAATGCGTACCTAGAGGTCTGTTATCAGATGACAAATGAGACC 241  
3598 GAAAGAGAGCAATGCGTACCTAGAGGTCTGTTATCAGATGACAAATGAGACC 3657  
242 AAGACCTGTAGAGTGGCGCGCTCCCAAGGTGCGCGCTCATTAACACATGACATTCG 301  
3658 AAGACCTGTAGAGTGGCGCGCTCCCAAGGTGCGCGCTCATTAACACATGACATTCG 3717  
302 GCTCTCGAGCTTTAATCTGTGACAGAGGCAAGCGGATGCAATTCGTGTGCGGACG 361  
3718 GCTCTCGAGCTTTAATCTGTGACAGAGGCAAGCGGATGCAATTCGTGTGCGGACG 3777  
362 GTGATGAGAGGAGGAGCGCTGCTTGGCGCGGCTCATCTTAAAGGCTCTCGG 421  
3778 GTGATGAGAGGAGGAGCGCTGCTTGGCGCGGCTCATCTTAAAGGCTCTCGG 3837  
422 GAGGCGCTCTGTGAGCGCGCGGCAAGTGCATGAGATTAAGAGCGCGGATGCA 481  
3838 GAGGCGCTCTGTGAGCGCGCGGCAAGTGCATGAGATTAAGAGCGCGGATGCA 3897  
482 CCGTGAAGTGAAGGCGGTGAATTCATCCCGTGAAGAGCTTGAAGACCAATGCA 541  
3898 CCGTGAAGTGAAGGCGGTGAATTCATCCCGTGAAGAGCTTGAAGACCAATGCA 3957  
542 GGTCCCGGCTGTTCACAGCAATCTCTCCCAAGAGAGTGCAGAGGCTTGAAGAG 601  
3958 GGTCCCGGCTGTTCACAGCAATCTCTCTCCCAAGAGAGTGCAGAGGCTTGAAGAG 4017  
602 CCACTGATGATGCTCCACCGGAGCGGTAAAGAGCAAGAGTCCCGGCTGATAGAG 661  
4018 CCACTGATGATGCTCCACCGGAGCGGTAAAGAGCAAGAGTCCCGGCTGATAGAG 4077  
662 CTCAGGCTTACAGAGTGTGTGCTCAACCTCTCGTTGCTGCAACAATGAGCTTGTG 721  
4078 CTCAGGCTTACAGAGTGTGTGCTCAACCTCTCGTTGCTGCAACAATGAGCTTGTG 4137



Db 1204 TGGCCGCCATCAAGGCGTAGCCCAAGACAGAAAGGGGCTCTAGAGGTGTCATATACCA 1263  
Qy 62 GCTTGAACGGGCGGGGACAAAACAGAGTGAAGGTGAGTTCAGATCCGTGTCAATGCTG 121  
Db 1264 GCTTGAACGGGCGGGGACAAAACAGAGTGAAGGTGAGTTCAGATGTTGTCAATGCTG 1323  
Qy 122 CCAGACCTTCTTGGGCACTGCAATTAAGGGGTGTGAGACTGTCTCAATGAGCCG 181  
Db 1324 CCCAAACCTTCTGGGCACTGCAATTAAGGGGTGTGAGACTGTCTCAATGAGCCG 1383  
Qy 182 GAACAGAGACATTTGGGTGACCTTAAGAGGTCTGTATCCAGATGTACACCAATGTGACC 241  
Db 1384 GAACAGAGACATTTGGGTGACCTTAAGAGGTCTGTATCCAGATGTATCAATGTATGACC 1443  
Qy 242 AAGACTCGTAGAGTGGGCGGCTCCCAAGGTGCCGCTCATTAACCATATGACTTTGG 301  
Db 1444 AAGACTCGTAGAGTGGGCGGCTCCCAAGGTGACGCTCATTTGACACCTTCACTTGG 1503  
Qy 302 GCTCCCTGGGACCTTTAAGCTGTGACAGAGGACGCGGATGTCAATTCCTGTGCGCGG 361  
Db 1504 GCTCCCTGGGACCTTTAAGCTGTGACAGAGGACGCGGATGTCAATTCCTGTGCGCGG 1563  
Qy 362 GTGATGGCAGGGGACGCTGTGTGCGCGGCTATCTTTAATTGAAGGCTCCTGCG 421  
Db 1564 GTGATAGCAGGGGACGCTGTGTGCGCGGCTATCTTTAATTGAAGGCTCCTGCG 1623  
Qy 422 GAGGCGCTGTGCTGTGCGCGGACGACATGCGGTAGGCAATTCAGAGCGCGGTATGCA 481  
Db 1624 GAGGCGCTGTGCTGTGCGCGGACGACGCGGTAGGCAATTTAGGGCGCGGTGTGCA 1683  
Qy 482 CCGGTGAGTGGCTAAGGGGTGAGCTTCATCCCGTAGAGACTTAGAGAACATGTA 541  
Db 1684 CCGGTGAGTGGCTAAGGGGTGAGCTTCATCCCGTAGAGAACCTTAGAGAACATGTA 1743  
Qy 542 GGTCCCGGTGTCTTCAGACAACTCTCCCAACAGACTGCGCCAGACTCAAGTGG 601  
Db 1744 GGTCCCGGTGTCTTCAGACAACTCTCTCCCAACAGACTGCGCCAGACTCAAGTGG 1803  
Qy 602 CCCACTGTGATGCTCCCAACGCGGAGGTGAGACCAAGGTCCCGGCGGCTATGCGAG 661  
Db 1804 CCCACTGTGATGCTCCCAACGCGGAGGTGAGACCAAGGTCCCGGCGGCTATGCGAG 1863  
Qy 662 CTCAGGGCTAAGGGGTGCTGCTCAACCCGCTGCTGCAACAAATGGGCTTTGGG 721  
Db 1864 CTCAGGGCTAAGGGGTGCTGCTCAACCCGCTGCTGCAACAAATGGGCTTTGGG 1923  
Qy 722 CTTAACATGTCAAGGCGGACCTTGAATCTTAACATCAGACTGCGGTGAGACAAATTA 781  
Db 1924 CTTAACATGTCAAGGCGGACCTTGAATCTTAACATCAGACTGCGGTGAGACAAATTA 1983  
Qy 782 CTAATGGGACGCCGATCACTGATTCACCTTACGCGCAAGTTCTTGGCGAGCGGCTGT 841  
Db 1984 CTAATGGGACGCCGATCACTGATTCACCTTACGCGCAAGTTCTTGGCGAGCGGCTGT 2043  
Qy 842 CAGGGGGGTGCTTATGACATTAATTTGAGAGAGGCACTCAACGATGGAATCA 901  
Db 2044 CAGGGGGGTGCTTATGACATTAATTTGAGAGAGGCACTCAACGATGGAATCA 2103  
Qy 902 TCTTGGGCAATGGGCACTGTCTTGAACAGACAGAGACCGGGGGGAGACTGACTGTG 961  
Db 2104 TCTTGGGCAATGGGCACTGTCTTGAACAGACAGAGACCGGGGGGAGACTGACTGTG 2163  
Qy 962 TGGCCACGCGTACCCCTCCGGGCTCGTCACTGTGCGGCTCATCATGAGAGGTTG 1021  
Db 2164 TGGCCACGCGTACCCCTCCGGGCTCGTCACTGTGCGGCTCATCATGAGAGGTTG 2223  
Qy 1022 CTCTGTGCACTCCGAGAGATCCCTTTATGGCAAGGCTATCCCTCTGAAGCAATTA 1081  
Db 2224 CTCTGTGCACTCCGAGAGATCCCTTTATGGCAAGGCTATCCCTCTGAAGCAATTA 2283  
Qy 1082 AAGGGGGAGAGATCTCATCTTCTGTGCACTCAAGAGAGAGTGGCAGACTGCGCGCA 1141  
Db 2284 AAGGGGGAGAGATCTCATCTTCTGTGCACTCAAGAGAGAGTGGCAGACTGCGCGCA 2343

Qy 1142 AACTGTGCGCGTTGGGCGGTCAATGCGGTGCTTACATACCGGGGCTTGAATGTGCGTCA 1201  
Db 2344 AACTGTGCGCGTTGGGCGGTCAATGCGGTGCTTACATACCGGGGCTTGAATGTGCGTCA 2403  
Qy 1202 TCCCGACCAAGTGTGACGTGTGTGTGCGCAACTGACGCGCTTCAATGACGCGCTTACCG 1261  
Db 2404 TCCCGACCAAGTGTGACGTGTGTGTGCGCAACTGACGCGCTTCAATGACGCGCTTACCG 2463  
Qy 1262 GCGACTTGGATTCGGGTATGACTGCAACAGTGTGTCAACCCAGACATGCCACTTACGCG 1321  
Db 2464 GCGACTTGGACTCGGTATGACTGCAATGAGTGTGTCAACCCAGACAGTGTGCAATTCAGCG 2523  
Qy 1322 TTGACCCCTACCTTCAACCTTGAACAATCAAGCTTCCCAAGATGCTGTCCGTAATC 1381  
Db 2524 TTGACCCCTACCTTCAACCTTGAACAATCAAGCTTCCCAAGATGCTGTCTCCGTAATC 2583  
Qy 1382 AACGTGCGGGGTGAGACTGCGAGAGGAGACAGGATCTACAGATTTGTGCGACCGGGG 1441  
Db 2584 AACGTGCGGGGTGAGACTGCGAGAGGAGACAGGATCTACAGATTTGTGCGACCGGGG 2643  
Qy 1442 AGCGTCTTGTGGCATGTTTGACTGTGTGTCTGTGCGAGTGTATGACGCGGTTGTG 1501  
Db 2644 AGCGTCTTGTGGCATGTTTGACTGTGTGTCTGTGCGAGTGTATGACGCGGTTGTG 2703  
Qy 1502 CTGGGTATGAGCTTACGCGCGCGGACCAAGCTTACAGATTTGTGCGACATGAAACGCC 1561  
Db 2704 CTGGGTATGAGCTTACGCGCGCGGACCAAGCTTACAGATTTGTGCGACATGAAACGCC 2763  
Qy 1562 CCGGACTTCCCGGTGTGCGCAAGACATCTTGAATTTGGGAGGCGCTTTACGCGGTCTCA 1621  
Db 2764 CCGGACTTCCCGGTGTGCGCAAGACATCTTGAATTTGGGAGGCGCTTTACGCGGTCTCA 2823  
Qy 1622 CCCACATGAGCGCCCATCTTCTATCCAGACAAAGAGTGGGAAAACCTTCCCTATC 1681  
Db 2824 CCCACATGAGCGCCCATCTTCTATCCAGACAAAGAGTGGGAAAACCTTCCCTATC 2883  
Qy 1682 TGGTGGCGTCAACACCGGTGTGCGTCAAGAGCTCAAGCGGCTCCCGGTGTGGGAGCC 1741  
Db 2884 TGGTGGCGTCAACACCGGTGTGCGTCAAGAGCTCAAGCGGCTCCCGGTGTGGGAGCC 2943  
Qy 1742 AGATGTGAGAGTGTGATCCGTCTCAAGCGCCCATCTTCAATGGGCAACCTCTGTAT 1801  
Db 2944 AGATGTGAGAGTGTGATCCGTCTCAAGCGCCCATCTTCAATGGGCAACCTCTGTAT 3003  
Qy 1802 ATGACTGGGCGCTGTCAAGATGAGTCACTTGAACGCAACCACTTCAATGGGCAACCTCTGTAT 1861  
Db 3004 ATGACTGGGCGCTGTCAAGATGAGTCACTTGAACGCAACCACTTCAATGGGCAACCTCTGTAT 3063  
Qy 1862 TGAATGTATGTGCGGCTGACCTGAGAGTGTGCAAGATACCTGGGTGCTCGTTGGCGGCG 1921  
Db 3064 TGAATGTATGTGCGGCTGACCTGAGAGTGTGCAAGATACCTGGGTGCTCGTTGGCGGCG 3123  
Qy 1922 TTCTGGCTGCTTTGGCGCGGTATTTGCTTCAACAGGCTGCGTGTATGATGAGTATGGA 1981  
Db 3124 TTCTGGCTGCTTTGGCGCGGTATTTGCTTCAACAGGCTGCGTGTATGATGAGTATGGA 3183  
Qy 1982 TTGTCTTGTCCGGAAGCCGGCAATCATACCGACAGAGAACTCTTACCGGAGTTGCG 2041  
Db 3184 TTGTCTTGTCCGGAAGCCGGCAATCATACCGACAGAGAACTCTTACCGGAGTTGCG 3243  
Qy 2042 ATGAATGAGAGAGTGTCT 2059  
Db 3244 ATGAATGAGAGAGTGTCT 3261

RESULT 12  
US-08-444-818-88  
; Sequence 88, Application US/08444818  
; Patent No. 6150087  
; GENERAL INFORMATION:  
; APPLICANT: Chien, David Y.  
; APPLICANT: Ruter, William J.

TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
NUMBER OF SEQUENCES: 777  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Chiron Corporation  
STREET: 4560 Horton Street  
CITY: Emeryville  
STATE: CA  
COUNTRY: USA  
ZIP: 94608-2916  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patent Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/444,818  
FILING DATE:  
CLASSIFICATION: 424  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/08/403,590  
FILING DATE: 14-MAR-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Harbin, Alisa A.  
REGISTRATION NUMBER: 33,895  
REFERENCE/DOCKET NUMBER: 0110.002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)359-3876  
TELEFAX: (508)359-3885  
INFORMATION FOR SEQ ID NO: 88:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 8316 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 1..8316  
US-08-444-818-88

Query Match 86.6%; Score 1784.4; DB 3; Length 8316;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1887; Conservative 0; Mismatches 171; Indels 0; Gaps 0;

QY 2 TGGCGCTATACGCGCTATGCGCGACAGCAAGGGGCGCTTTGGAGTGCATATACCA 61  
DB 2735 TGGCGCGCTATACGCGCGCTATGCGCGACAGCAAGGGGCGCTTTGGAGTGCATATACCA 2794

QY 62 GCTTGACCGGCGGACAAAAAACAAGTGAAGGTGAGTTCAGATCGTGCACCTGCTG 121  
DB 2795 GCTTGACCGGCGGACAAAAAACAAGTGAAGGTGAGTTCAGATCGTGCACCTGCTG 2854

QY 122 CCCAGACTTTCTTGGCACTGCTGATTAACGGGGTGTGTGACTGTCTACATGAGCCG 181  
DB 2855 CCCAGACTTTCTTGGCACTGCTGATTAACGGGGTGTGTGACTGTCTACATGAGCCG 2914

QY 182 GAAACAAGACATTTGGGTGACCTTAAGGGGCTTGTTATCCAGATGTACCAATGTGAGCC 241  
DB 2915 GAAACAAGACATTTGGGTGACCTTAAGGGGCTTGTTATCCAGATGTACCAATGTGAGCC 2974

QY 242 AAGACTCTAGAGCTGGCCCGCTCCCAAGTGCCTGCTCATTTAACCATGCACTTGGC 301  
DB 2975 AAGACTCTAGAGCTGGCCCGCTCCCAAGTGCCTGCTCATTTAACCATGCACTTGGC 3034

QY 302 GCTCTCTCGGACCTTTAATCTGTGTACGAGGCAAGCGAGTTCATTCTGTGCGCCGACGG 361  
DB 3035 GCTCTCTCGGACCTTTAATCTGTGTACGAGGCAAGCGAGTTCATTCTGTGCGCGCCGACGG 3094

QY 362 GGTGATGGAGGGGAGCGGCTTTGGCCCGGCTATCTCTACTTGAAGAGCTCTGG 421  
DB 3095 GGTGATGGAGGGGAGCGGCTTTGGCCCGGCTATCTCTACTTGAAGAGCTCTCTGG 3154

QY 422 GAGGCGCTCTGTGTGCCCCCGAGACATGCGTAGGCATATTCAGAGCCGCGTATGCA 481

DB 3155 GGGGTCCGCTGTGTGCCCCCGAGGACAGCGGTGGCATATTTAGGGCCGCGGTGTGCA 3214

QY 482 CCCGTGAGGTGCTTAAGCGCGGTGACCTTCAATCCCGTGAAGAGCTTAGAGACATCA 541

DB 3215 CCCGTGAGGTGCTTAAGCGCGGTGACCTTCAATCCCGTGAAGAGCTTAGAGACATCA 3274

QY 542 GGTCCCGGTGTTCAGACAACTCTCCCAAGCAGAGTGCAGGAGCTACCAAGTGG 601

DB 3275 GGTCCCGGTGTTCAGAGATACTCTCTCAACAGTAGTGTCCCAAGCTTCCAGGTGG 3334

QY 602 CCCACTGTCATGCTTCCCAAGCGAGCGGTAAAGACCAAGGTCCCGGCGCATACGAG 661

DB 3335 CTCACCTCATGCTTCCCAAGCGAGCGGCAAAAGACCAAGGTCCCGGCGCATACGAG 3394

QY 662 CTCAGGGCTTAAGGTGCTGTGCTCAACCCCTCCGTGTGCTGCAACAATGGGCTTGGTG 721

DB 3395 CTCAGGGCTTAAGGTGCTGTGCTCAACCCCTCCGTGTGCTGCAACACTGGGCTTGGTG 3454

QY 722 CTTACATGTCCAAAGGCCATGGGATTTGATCTTAACATCAGAGCTGGGGTGAACAATTA 781

DB 3455 CTTACATGTCCAAAGGCTATGGATCGATCTTAACATCAGAGCGGGGTGAACAATTA 3514

QY 782 CTACTGGAGGCCGATCAAGTATTCACCTACCGCAAGTTCCTTGGCGAGCGGCTGT 841

DB 3515 CCACTGGAGGCCGATCAAGTATTCACCTACCGCAAGTTCCTTGGCGAGCGGCTGT 3574

QY 842 CAGGGGGTCTTTAGACATAATTAATTTGTGACAGATGCTCACTCCAGATGCAATCCA 901

DB 3575 CAGGGGGTCTTTAGACATAATTAATTTGTGACAGATGCTCACTCCAGATGCAATCCA 3634

QY 902 TCTTGGGATTTGGACCTGTCTTGAACAAGACAGACCGGGGGCGAGACTGACTGTGC 961

DB 3635 TCTTGGGATTTGGACCTGTCTTGAACAAGACAGACCTGGGGCGAGACTGACTGTGC 3694

QY 962 TCGCCACGCTACCCCTTCGGGCTCCGCTCACTGTGCCCCATCTTAACATCGAGAGTTG 1021

DB 3695 TCGCCACGCTACCCCTTCGGGCTCCGCTCACTGTGCCCCATCTTAACATCGAGAGTTG 3754

QY 1022 CTCTGTCCATACCGGAGAGATCCCTTTTATGGAAGCTATTCCCTTGAAGCAATTA 1081

DB 3755 CTCTGTCCATACCGGAGAGATCCCTTTTATGGAAGCTATTCCCTTGAAGCAATTA 3814

QY 1082 AGGGGGGAGACATCTTCTTGTGCACTCAAAAGAAAGTGCAGAGCTCGCGCA 1141

DB 3815 AGGGGGGAGACATCTTCTTGTGCACTCAAAAGAAAGTGCAGAGCTCGCGCA 3874

QY 1142 AACTGTGCGTGGGCTCAATGCGGTGCTTACTACCGCGGCTTGAATGTCCGTCA 1201

DB 3875 AACTGTGCGTGGGCTCAATGCGGTGCTTACTACCGCGGCTTGAATGTCCGTCA 3934

QY 1202 TCCCGACCAAGTGTGACCTTGTGCTGCGGCACTGAAGCCCTCAATGACCGGCTTTACG 1261

DB 3935 TCCCGACCAAGGCGCATTTGTGTGTGCGCAACCGAAGCTCTATGACCGGCTTATACG 3994

QY 1262 GCGACTTGATTCGGTGAATGACTGCAACAGTGTGTCAACCGACAGTTCAGCC 1321

DB 3995 GCGACTTGATTCGGTGAATGACTGCAATGCTGTGTCAACCGACAGTTCAGCC 4054

QY 1322 TTGACCTTACCTTCACTTGAAGACATACGCTTTCCTCCAGAGTCTGTCTCCGTA 1381

DB 4055 TTGACCTTACCTTCACTTGAAGACATACGCTTTCCTCCAGAGTCTGTCTCCGTA 4114

QY 1382 AACGTGGGGTGAAGCTGGCAAGGGAAGCCAGAGATCTAACAATTTGTGGAACGGGGG 1441

DB 4115 AACGTGGGGTGAAGCTGGCAAGGGAAGCCAGAGATCTAACAATTTGTGGAACGGGGG 4174

QY 1442 AGCGTCTTCTGAGCATGTTTGACTGTCTGTCTCTGCGAGTGTATGACGCGGTTGTG 1501

DB 4175 AGCGTCTTCTGAGCATGTTTGACTGTCTGTCTCTGCGAGTGTATGACGCGGTTGTG 4234

QY 1502 CTTGGTATGACTTACGCGCGCGGACCAAGTTAGGCTACGAGCATATCATGAACCC 1561

DB 4235 CTGGTATGAGCTACGCCGCCGAGACTACAGTAACTGACGAGTAACTGACACCC 4294  
QY 1552 CGGACCTTCCCGTGTGCAAGACATCTTGAATTTTGGAGGGCGCTTTACGGCTCA 1621  
DB 4295 CGGGGCTTCCCGTGTGCAAGACATCTTGAATTTTGGAGGGCGCTTTACGGCTCA 4354  
QY 1622 CCCACATAGACGCCACCTTCTCTATCCCAAGACAGAGTGGGAAAACTTCCCTATC 1681  
DB 4355 CTCATATAGATGCCACATTTCTATCCCAAGACAGAGTGGGAAAACTTCTTACC 4414  
QY 1682 TGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGAGC 1741  
DB 4415 TGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGAGC 4474  
QY 1742 AGATGTGAGAGTGTGATCTCTCTCAAGCCACCTCTCATAGGCGCAACCTCTGCTAT 1801  
DB 4475 AGATGTGAGAGTGTGATCTCTCTCAAGCCACCTCTCATAGGCGCAACCTCTGCTAT 4534  
QY 1802 ATAGACTGGGCGCTGTCCAGAAATGAAGTCAACCTGACGACCCAGTCAACAAATATCA 1861  
DB 4535 ACAGACTGGGCGCTGTCCAGAAATGAAGTCAACCTGACGACCCAGTCAACAAATATCA 4594  
QY 1862 TGACATGATATGTGCGCTGACCTGAGAGTGTGACGAGTACCTGGTGTCTGTGGCGAG 1921  
DB 4595 TGACATGATATGTGCGCGGACCTGAGAGTGTGACGAGTACCTGGTGTCTGTGGCGAG 4654  
QY 1922 TTCTGGCTGTGGCGCGGATTTGCTATCAAGGCTGCTGTCTATAGTAGTAGA 1981  
DB 4655 TCCTGGCTGTGGCGCGGATTTGCTATCAAGGCTGCTGTCTATAGTAGTAGAG 4714  
QY 1982 TTGTCTGTGCGGAAAGCGGCAATCATCCGACAGAGGAGTCTCTACGGAGTTGCG 2041  
DB 4715 TCCTGTGTGCGGAAAGCGGCAATCATCTGACAGGAGTCTCTACGGAGTTGCG 4774  
QY 2042 ATGAATGAGAGTGTCT 2059  
DB 4775 ATGAGATGAGAGTGTCT 4792

RESULT 13  
US-08-444-818-137  
; Sequence 137, Application US/08444818  
; Patent No. 6150087  
; GENERAL INFORMATION:  
; APPLICANT: Chien, David Y.  
; APPLICANT: Rutter, William J.  
; TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
; NUMBER OF SEQUENCES: 777  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Chiron Corporation  
; STREET: 4560 Horton Street  
; CITY: Emeryville  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94608-2916  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; COMPUTER: IBM PC compatible  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: Patentin Release #1.0, Version #1.30  
; CURRENT APPLICATION DATA:  
; APPLICATION NUMBER: US/08/444,818  
; FILING DATE:  
; CLASSIFICATION: 424  
; PRIORITY APPLICATION DATA:  
; APPLICATION NUMBER: US/08/403,590  
; FILING DATE: 14-MAR-1995  
; ATTORNEY/AGENT INFORMATION:  
; NAME: Harbin, Alisa A.  
; REGISTRATION NUMBER: 33,895  
; REFERENCE/DOCKET NUMBER: 0110,002  
; TELECOMMUNICATION INFORMATION:  
; TELEPHONE: (508)359-3876

TELEFAX: (508)359-3885  
; INFORMATION FOR SEQ ID NO: 137:  
; SEQUENCE CHARACTERISTICS:  
; LENGTH: 8987 base pairs  
; TYPE: nucleic acid  
; STRANDEDNESS: single  
; TOPOLOGY: linear  
; MOLECULE TYPE: cDNA  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: 1..8985  
; US-08-444-818-137

Query Match 86.6%; Score 1784.4; DB 3; Length 8987;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1887; Conservative 0; Mismatches 171; Indels 0; Gaps 0;

QY 2 TGGCGCTATATCAAGCGCTATGCGGACAGACAGAGGCGCTTTGGAGTCAATATCACCA 61  
DB 3077 TGGCGCGCATCAAGCGGCGTACCGCCAGACAGAGAGGCGCTCTAGGCGTCAATATCACCA 3136  
QY 62 GCTTGAACCGCGCGGACAAAAACAGGTGAGAGGTGAGAGTTCAGATGCTGTCAATGCTG 121  
DB 3137 GCTTAACTGCGCGGACAAAAACAGGTGAGAGGTGAGAGTTCAGATGCTGTCAATGCTG 3196  
QY 122 CCCAGACTTTGTGGCAACCTGCAATTAAGGGGTGTGTGACGTGCTTACCATGAGGCG 181  
DB 3197 CCCAACTTCTGTGCAAGTGCATTAATGGAGTGTGTGAGCTGTCTACCAAGGCGCG 3256  
QY 182 GAACAGAGACCAATGCGTCACTTAAGGCTCTGTATACAGATGACCAATGTGAC 241  
DB 3257 GAACAGAGACCAATGCGTCACTTAAGGCTCTGTATACAGATGACCAATGTGAC 3316  
QY 242 AAGACTGTGAGCTGCGCGCGCTCCCAAGTGTGCGCGCTCATTAACATGACATCTTGC 301  
DB 3317 AAGACTGTGAGCTGCGCGCGCTCCCAAGTGTGCGCGCTCATTAACATGACATCTTGC 3376  
QY 302 GCTCTGGAACCTTAACTGAGTCAAGAGGACGCGGATGATCTCTGTGCGGACGAG 361  
DB 3377 GCTCTGGAACCTTAACTGAGTCAAGAGGACGCGGATGATCTCTGTGCGGACGAG 3436  
QY 362 GTGATGAGAGGAGGACGCTGCTTTCGCGCGGCTATCTTAAAGGCTCTCTCG 421  
DB 3437 GTGATGAGAGGAGGACGCTGCTTTCGCGCGGCTATCTTAAAGGCTCTCTCG 3496  
QY 422 GAGGCCCTGTGCTGTGCGCGGACGACATGCGCTGATGACATTTAGAGCCGCGGTATGA 481  
DB 3497 GAGGCCCTGTGCTGTGCGCGGACGACATGCGCTGATGACATTTAGAGCCGCGGTATGA 3556  
QY 482 CCCGTGAGTGGCTAAGGCGGCTGATCTTATCCCGGTAGAGGCTTAGAGCAACATGA 541  
DB 3557 CCCGTGAGTGGCTAAGGCGGCTGATCTTATCCCGGTAGAGGCTTAGAGCAACATGA 3616  
QY 542 GGTCCCGGTGTCTCAGACAACTCTCCACAGAGTGGCCGAGCTTCAAGTGG 601  
DB 3617 GGTCCCGGTGTCTCAGACAACTCTCTCCACAGAGTGGCCGAGCTTCAAGTGG 3676  
QY 602 CCCACTGATGCTCCACCGGACGCGTAAAGACCAAGTCCCGCGCTATGCGAG 661  
DB 3677 CTCACCTCACTGCTCCACAGGACGCGCAAAAGACCAAGTCCCGCGCTATGCGAG 3736  
QY 662 CTCAGGGCTAAGAGTGTGCTCAACCCCTCGGTGCTGCAACATGGGCTTTGGG 721  
DB 3737 CTCAGGGCTAAGAGTGTGCTCAACCCCTCGGTGCTGCAACATGGGCTTTGGG 3796  
QY 722 CTTATATGTCAGAGCCCATGGATGATCTTAACTGAGAGTGGGTGAGAGCAATTA 781  
DB 3797 CTTATATGTCAGAGCCCATGGATGATCTTAACTGAGAGTGGGTGAGAGCAATTA 3856  
QY 782 CTACTGGAGCCCATGACATGATTTCACTTACGAGGAAAGTCTTTCGACGCGGCGGTGT 841  
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Oy      1992  TTGCTTGTCCGGAAGCGCGCAATCATATACCCGACAGGAAGTCTCTACCGGAGTTGC 20411
Db      5057  TCGTCTTGTCCGGGAAGCGCGCATCATCTGACAGGAAGTCTCTACCGAAGTTGC 5116
Oy      2042  ATGAATGGAAGAGTGCT 2059
Db      5117  ATGAGATGGAAGAGTGCT 5134

RESULT 14
US-08-444-818-122
; Sequence 122, Application US/08444818
; Patent No. 6150087
; GENERAL INFORMATION:
; APPLICANT: Chien, David Y.
; APPLICANT: Rutter, William J.
; TITLE OF INVENTION: NANBV Diagnostics and Vaccines
; NUMBER OF SEQUENCES: 777
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Chiron Corporation
; STREET: 4560 Horton Street
; CITY: Emeryville
; STATE: CA
; COUNTRY: USA
; ZIP: 94608-2916
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patentin Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/444, 818
; FILING DATE:
; CLASSIFICATION: 424
; PRIOR APPLICATION DATA:
; APPLICATION NUMBER: US/08/403,590
; FILING DATE: 14-MAR-1995
; ATTORNEY/AGENT INFORMATION:
; NAME: Harbin, Alisa A.
; REGISTRATION NUMBER: 33,895
; REFERENCE/DOCKET NUMBER: 0110.002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (508)359-3876
; TELEFAX: (508)359-3885
; INFORMATION FOR SEQ ID NO: 122:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 9185 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
US-08-444-818-122

Query Match      86.6%; Score 1784.4; DB 3; Length 9185;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1887; Conservative 0; Mismatches 171; Indels 0; Gaps 0;

Oy      2  TGGCGCTATACGAGCTTATGCTCCAGACAGACAAAGGCGCTTTGGAGTGCATATACCA 61
Db      3396  TGGCGCCCATACAGCGCGTACGCCAGACAGACAAAGGCGCTCTCTAGGGTGCTATATACCA 3455
Oy      62  GCTTGACCGCGCGCGGACAAAAACAGGTGAGAGGTGAGTTCAAGATGTGTCACTGCTG 121
Db      3456  GCGTAACTGCGCGGACAAAAACCAAGTGAAGGGTGAAGTCAATGTGTCAACTGCTG 3515
Oy      122  CCCAGACTTTTGTGGCAACTGCATTAAACGGGGGTGTGTGGACGTGTACCATGAGACCG 181
Db      3516  CCCAACTTCTCTGGCAACGTGCATCAATGAGGGGTGTGCTGACGTGTCTTACCAACGGGCGG 3575
Oy      182  GAAACAGACACTTGCCTCACTTAAGGCTCTGTTATCAGATGTACCAACCAATGTGACC 241

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Db 3576 GAAAGAGGACATCGGTCAACCCAGGGGCTGTATCCAGATGTAATCAATGTAAGACC 3635  
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 Db 3636 AAGACTGTAGAGCTGGCCCGCTCCCAAGGTGCCGCTCATTAACACCATGCTTGGC 3695  
 Qy 302 GCTCTCGGAGCTTAACTGTACAGAGGCAAGCGATGTCACTGTGGCCGACCGG 361  
 Db 3686 GCTCTCGGAGCTTAACTGTACAGAGGCAAGCGATGTCACTGTGGCCGACCGG 3755  
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 Db 3786 GTGATGGAGGGGAGCTGTCTTGGCCCGGCTATCTTACTTGAAGGCTCTCGG 3815  
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 Db 3816 GGGGTCCGTGTGTGGCCCGGAGCATGCGGTAGGCAATTATAGGGCCGCGTGTGCA 3875  
 Qy 482 CCCGTGAGTGGCTAAGGGGCTGATCTTCCGTAGAGCTTGAAGCAACATGA 541  
 Db 3876 CCCGTGAGTGGCTAAGGGGCTGATCTTCCGTAGAGCTTGAAGCAACATGA 3935  
 Qy 542 GGTCCCGGTGTCTCAGACAACTCTCCCAAGAGTGGCCGAGCTACCAAGTGG 601  
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 Db 3996 CTCACCTCATGTCTCCACAGGCAAGGCAACCAAGTCCCGGCGCATATGACG 4055  
 Qy 662 CTCAGGGCTACAAGGGCTGTGCTCAACCCCTCGGTGTGCAAAATGGGCTTGTGG 721  
 Db 4056 CTCAGGGCTATAGGGCTAGTATCTCAACCCCTGTGTGTGCAAAATGGGCTTGTGG 4115  
 Qy 722 CTATAGTCTCAAGGCCCATGTGATCTTACATCAGAGCTGSGGTGAGAGCAATTA 781  
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 Qy 782 CTATGAGAGCCCATCATGATCTTCAACGAGGATGTTCTTGGCCGAGCGGCTGT 841  
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 Qy 842 CAGGGGGTCTTATACATTAATTGTGAGAGGCTCAACGAGTGGAGATCA 901  
 Db 4236 CAGGGGGTCTTATACATTAATTGTGAGAGGCTCAACGAGTGGAGATCA 4295  
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 Db 4296 TCTTGGGCAATTGGGCACTGTCTTGAACCAAGCAGAGCTGCGGGGCGAGACTGTGTC 4355  
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 Qy 1022 CTCTGTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATCCCTTGAAGCAATTA 1081  
 Db 4416 CTCTGTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATCCCTTGAAGCAATTA 4475  
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 Db 4476 AGGGGGGAGAGATCTCTCTGCACTCAAAAGAGAGTGGAGAGTGGCGGCA 4535  
 Qy 1142 AACTGTGTGGGCGTCAATGCGGTGTCTTACTACGCGGCTTGAATGTGTCCGTCA 1201  
 Db 4536 AACTGTGTGGGCGTCAATGCGGTGTCTTACTACGCGGCTTGAATGTGTCCGTCA 4595  
 Qy 1202 TCCGAGCAGTGGTACAGTGTGTGTGAGCAATGAGCCCTCATGACCGGCTTACCG 1261  
 Db 4596 TCCGAGCAGTGGGCGATGTTGTGTGTGAGCAATGAGCCCTCATGACCGGCTTACCG 4655  
 Qy 1262 GCGACTTGATTCGGTGTGATGAGCTCAACAGTGTGTCAACGAGAGTGTGACGC 1321

Db 4656 GCGACTTGAGTCCGGTATAGACTGTCAATTAAGTGTGTCAACCCAGAGAGTGTGACGC 4715  
 Qy 1322 TTGACCTTACCTTCAACCTTGAAGATCAGGCTTCCCAAGAGTGTGTCTCCGATCTC 1381  
 Db 4716 TTGACCTTACCTTCAACCTTGAAGATCAGGCTTCCCAAGAGTGTGTCTCCGATCTC 4775  
 Qy 1382 AACGTGGGGTATGAGACTGGCAGAGGGAAGCAGGATCTAAGATTTGTGGCAGCGGG 1441  
 Db 4776 AACGTGGGGGAGAGCTGGCAGGGAAGCAGGATCTAAGATTTGTGGCAGCGGG 4835  
 Qy 1442 AGCGTCTTCTGAGCTGATGATCTGTGTCTCTGCGAGTGTATGACCGGGTGTG 1501  
 Db 4836 AGCGCTTCTGAGCTGATGATCTGTGTCTCTGCGAGTGTATGACCGAGCTGTG 4895  
 Qy 1502 CTGTGTATGAGCTTACCGCCCGAGACAGATTAAGCTACAGACATATGAACACC 1561  
 Db 4896 CTGTGTATGAGCTTACCGCCCGAGACAGATTAAGCTACAGACATATGAACACC 4955  
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 Db 4956 CGGAGCTTCCGCTGTGCAAGACATCTTGAATTTGGGAGGGCGCTTTACAGGCTCA 5015  
 Qy 1622 CCCCATAGAGCCCATCTTCTATCCAGACAAAGCAGAGTGGGAAAACTTCCCTATC 1681  
 Db 5016 CTATATAGATGCCCATCTTCTATCCAGACAAAGCAGAGTGGGAAAACTTCCCTATC 5075  
 Qy 1682 TGTAGCTTACCAAGCCAGCTGTGCTTGAAGCTCAAGCCCTTCCCTGTGTGGAGC 1741  
 Db 5076 TGTAGCTTACCAAGCCAGCTGTGCTTGAAGCTCAAGCCCTTCCCTGTGTGGAGC 5135  
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 Db 5136 AGATGTGAAGTGTGATTCGCTCAAGCCCATCTCATAGGCAACCTGTGTAT 5195  
 Qy 1802 ATAGACTGGGCGCTGTCCAGATGAAGTACCTTGAGCCAGCCAGTCAACATATCA 1861  
 Db 5196 ATAGACTGGGCGCTGTCCAGATGAAGTACCTTGAGCCAGCCAGTCAACATATCA 5255  
 Qy 1862 TGACATGATGTGGCTGACCTGAGAGTGTGTCAAGATACCTGGGTGTGTGGCGGCG 1921  
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 Db 5376 TTGTCTGTCCGGAAGCGGCAATCATACCGAGAGAGTCTCTACCGGAGTTCG 5435  
 Qy 2042 ATGAATGGAAGTGTCT 2059  
 Db 5436 ATGAATGGAAGTGTCT 5453

RESULT 15  
 US-08-444-818-123/c  
 ; Sequence 123, Application US/08444818  
 ; Patent No. 6150087  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Chien, David Y.  
 ; APPLICANT: Ruter, William J.  
 ; TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
 ; NUMBER OF SEQUENCES: 777  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESS: Chiron Corporation  
 ; STREET: 4560 Horton Street  
 ; CITY: Emeryville  
 ; STATE: CA  
 ; COUNTRY: USA  
 ; ZIP: 94608-2916  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk



COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/444,818  
FILING DATE:  
CLASSIFICATION: 424  
PRIORITY APPLICATION DATA:  
APPLICATION NUMBER: US/08/403,590  
FILING DATE: 14-MAR-1995  
ATTORNEY/AGENT INFORMATION:  
NAME: Harbin, Alisa A.  
REGISTRATION NUMBER: 33,895  
REFERENCE/DOCKET NUMBER: 0110.002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)359-3876  
TELEFAX: (508)359-3885  
INFORMATION FOR SEQ ID NO: 123:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 9185 base pairs  
TYPE: nucleic acid  
STRADEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
ANTI-SENSE: YES  
US-08-444-818-123

Query Match 86.6%; Score 1784.4; DB 3; Length 9185;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1887; Conservative 0; Mismatches 171; Indels 0; Gaps 0;  
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QY 302 GCTCTCGGACCTTTACCTGTGCAGAGGCAAGCGGATGCTATTCTGTGCGCGACGGG 361  
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DB 5430 GGTATGGGAGGGGAGCGCTTGGCGCGGCTATCTTACTTGAAGGCTCTCTGG 5371  
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QY 1262 GCGACTTGCATTCGATGATGATGCACTGCAACAGTGTGCAACCGACAGTGCAGCTCAGCC 1321  
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OY 1862 TGACATGTAATGCGGCTGACCTGGAAGTGTCAAGATACCTGGGTGCTCGTTGGCGGG 1921
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OY 2042 ATGAATGGAAGATGCT 2059
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Job time : 396 secs

Work (1999)

GenCore version 5.1.7  
Copyright (c) 1993 - 2006 Bioceleration Ltd.

OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:28:25 ; Search time 1511 Seconds  
(without alignments) 11279.410 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061

Sequence: 1 atggcgctacacgcgccta.....atgaatggaagagtcgcga 2061

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Searched: 9793542 seqs, 4134689005 residues

Total number of hits satisfying chosen parameters: 19587084

Minimum DB seq length: 0  
Maximum DB seq length: 200000000

Post-processing: Minimum Match 0\*

Maximum Match 100\*

Listing first 45 summaries

Database : Published Applications NA Main:\*

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- 9: /cgn2\_6/ptodata/1/pubpna/US10E\_PUBCOMB.seq:\*
- 10: /cgn2\_6/ptodata/1/pubpna/US11\_PUBCOMB.seq:\*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
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3	2061	100.0	2061	US-10-307-047-1	Sequence 1, Appl
4	2061	100.0	2061	US-10-817-591-16	Sequence 16, Appl
5	2061	100.0	2061	US-11-043-808-1	Sequence 1, Appl
6	1786	86.7	9379	US-09-916-359-1	Sequence 1, Appl
7	1786	86.7	9401	US-10-445-724-1	Sequence 1, Appl
8	1781.2	86.4	2058	US-09-881-239-2	Sequence 2, Appl
9	1781.2	86.4	2058	US-10-643-853-2	Sequence 2, Appl
10	1781.2	86.4	2058	US-10-658-782-1	Sequence 1, Appl
11	1779.6	86.3	2058	US-09-881-654-1	Sequence 1, Appl
12	1779.6	86.3	2058	US-10-637-323-1	Sequence 1, Appl
13	1779.6	86.3	2058	US-10-899-715-1	Sequence 1, Appl
14	1774.8	86.1	12980	US-09-238-076-5	Sequence 5, Appl
15	1774.8	86.1	12980	US-09-995-937-5	Sequence 5, Appl
16	1774.8	86.1	12980	US-09-917-563-5	Sequence 5, Appl
17	1773.2	86.0	9646	US-09-238-076-1	Sequence 1, Appl
18	1773.2	86.0	9646	US-09-995-937-1	Sequence 1, Appl
19	1773.2	86.0	9646	US-09-917-563-1	Sequence 1, Appl
20	1765.2	85.6	9599	US-10-189-359-13	Sequence 13, Appl
21	1765.2	85.6	10803	US-09-747-419-17	Sequence 17, Appl
22	1765.2	85.6	10803	US-10-259-275-17	Sequence 17, Appl
23	1765.2	85.6	10803	US-11-006-313-17	Sequence 17, Appl

24	1762	85.5	9416	US-09-929-955-13	Sequence 13, Appl
25	1762	85.5	9416	US-10-104-966-13	Sequence 13, Appl
26	1762	85.5	9416	US-10-719-619-13	Sequence 13, Appl
27	1762	85.5	9416	US-10-817-591-13	Sequence 13, Appl
28	1757.2	85.3	9669	US-09-742-659-3	Sequence 3, Appl
29	1754	85.1	6609	US-10-475-989-1	Sequence 1, Appl
30	1754	85.1	8451	US-10-475-989-3	Sequence 3, Appl
31	1754	85.1	9622	US-10-475-989-2	Sequence 2, Appl
32	1752.4	85.0	3636	US-10-939-958-4	Sequence 4, Appl
33	1750.8	84.9	9416	US-09-238-076-19	Sequence 19, Appl
34	1750.8	84.9	9416	US-09-995-937-19	Sequence 19, Appl
35	1750.8	84.9	9416	US-09-917-563-19	Sequence 19, Appl
36	1749.2	84.9	9365	US-09-827-668-7	Sequence 7, Appl
37	1747.6	84.8	3636	US-10-939-958-2	Sequence 2, Appl
38	1726.6	83.8	2073	US-10-133-133A-5	Sequence 5, Appl
39	1557.8	75.6	2064	US-09-884-456-69	Sequence 69, Appl
40	1557.8	75.6	2064	US-09-884-456-69	Sequence 69, Appl
41	1557.8	75.6	2523	US-09-884-456-85	Sequence 85, Appl
42	1557.8	75.6	2523	US-09-884-456-85	Sequence 85, Appl
43	1411.8	68.5	5211	US-10-328-127-1	Sequence 1, Appl
44	1411.8	68.5	5211	US-10-328-206-1	Sequence 1, Appl
45	1411.8	68.5	5211	US-11-140-379-1	Sequence 1, Appl

## ALIGNMENTS

RESULT 1  
US-09-929-955-16  
Sequence 16, Application US/09929955  
Patent No. US20020136740A1  
GENERAL INFORMATION:  
APPLICANT: Matci Salberg  
TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND  
FILE REFERENCE: TRIPEP.23AUS2  
CURRENT APPLICATION NUMBER: US/09/929,955  
CURRENT FILING DATE: 2001-08-15  
PRIOR APPLICATION NUMBER: 09/705,547  
PRIOR FILING DATE: 2000-11-03  
PRIOR APPLICATION NUMBER: 60/229,175  
PRIOR FILING DATE: 2000-08-29  
PRIOR APPLICATION NUMBER: 60/225,767  
PRIOR FILING DATE: 2000-08-17  
NUMBER OF SEQ ID NOS: 49  
SOFTWARE: FastSeq for Windows Version 4.0  
SEQ ID NO 16  
LENGTH: 2061  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Hepatitis C virus NS3/4A coding region  
US-09-929-955-16

Query Match 100.0%; Score 2061; DB 3; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0; Indels 0; Gaps 0;  
Matches 2061; Conservative 0; Mismatches 0;

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DB 61 AGCTTGACCGCGCGGAGCAAAAACGAGGTGAGGGGTGAGGTTCAATCTGTCAACTGTT 120  
QY 121 GCCGACCTTTCTTGCAACCTGATTAACGAGGAGTGTGAGCTGTCTACCATGAGGCC 180  
DB 121 GCCGACCTTTCTTGCAACCTGATTAACGAGGAGTGTGAGCTGTCTACCATGAGGCC 180  
QY 181 GGACAGGACCATTCGCTCACTAAGGTCCTGTATTCAGATGTACCAATGTGAGC 240  
DB 181 GGACAGGACCATTCGCTCACTAAGGTCCTGTATTCAGATGTACCAATGTGAGC 240



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/ SEQ ID NO 1
/ LENGTH: 2061
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Hepatitis C virus NS3/4A coding region
US-09-930-591-1
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Query Match      100.0%; Score 2061; DB 3; Length 2061;
Beeb Local Similarity 100.0%; Pred. No. 0;
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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DB 1 ATGGGCGCTATCAAGGCGCTATGCGGAGCAAGAGGCGCTTTGGATGATATACACC 60
QY 61 AGCTTGACCGGCGCGGACCAAAAACAGGTGAGGGTGAAGTTCAAGTGTGCAACTGCT 120
DB 61 AGCTTGACCGGCGCGGACCAAAAACAGGTGAGGGTGAAGTTCAAGTGTGCAACTGCT 120
QY 121 GCCCGACTTTTCTTGGCAACCTGCAATTAAACGGGGTGTGTGGACTGTCTAACATGAGACC 180
DB 121 GCCCGACTTTTCTTGGCAACCTGCAATTAAACGGGGTGTGTGGACTGTCTAACATGAGACC 180
QY 181 GGAACAGAGAACCATTTGCGTCACTTAAGGGTCTGTTATCCAGATGTACACCAATGTGAGC 240
DB 181 GGAACAGAGAACCATTTGCGTCACTTAAGGGTCTGTTATCCAGATGTACACCAATGTGAGC 240
QY 241 CAAGAAGCTGTAGGCTGCGCCGCTCCCAAGGTGCGCGCTCATTTAAACCATGACCTTGC 300
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DB 301 GGCCTCTCGGACCTTTACTGTGTCAAGAGCACGCCGATGTCTTGTGTGCGCGAGAGG 360
QY 361 GGTGATGAGAGGGGAGCGCTTTCGCGCGGCGCTATCTTTACTTTGAAAAGCTCTGCG 420
DB 361 GGTGATGAGAGGGGAGCGCTTTCGCGCGGCGCTATCTTTACTTTGAAAAGCTCTGCG 420
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DB 421 GGAGGCGCTCTGCTGTGCGCCGACAGACATGCGGTAGGCAATTGACAGCGCGGTATGC 480
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DB 481 ACCCGTGAAGTGGCTTAAGGCGGTGGAATTATCCCGCTAGAGAGCTTGAAGCAACCATG 540
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DB 541 AGGTCCCGGGTGTCTCAGACAACTCTGCCGACAGAGTGCCTCCAGAGCTAACCAAGTG 600
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DB 781 ACTACTGAGCAGCCCGATCACTATTCACTACAGGCAAGTCTTTGCGACGCGCGGTGT 840
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DB 841 TCAAGGGGGTGTATTGACATTAATTAATTGTGACAGAGTGCCTCAACGAGATCAATCC 900
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DB 1141 AAACGTGTGCGGTGGGGGTCAATGCGGTGCTTAATCCCGGCTTGAATGTGCGTC 1200
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DB 1201 ATCCGACCAAGTGTGACGTTGTGCTGCTGAGCACTGACGCGCTATGACCGGCTTTAC 1260
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DB 1321 CTGGAACCTTACCTTACCAATTGAGACATCAAGCTTCCCGAGAGTGTCTCCGCTACT 1380
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DB 1801 TATAGACTGGGCGCTGTCCAGATGAAGTCAACCCAGTACCAAGTATATATC 1860
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DB 1861 ATGACATGATGTGCGGTGACCTGGAAGTCTGACAGATGACTGGGTGCTGTTGGCGGC 1920
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DB 1921 GTTCTGGCTCTTTGGCGCGGATGCTCATCAAGGCTGGGTGCTATGATAGTATAG 1980
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Db 1981 ATTGCTTGTCCGGAAGCCGCGCAATCATACCCGACAGGAGTCTCTACCGGAGTTTC 2040  
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Db 2041 GATGAATGGAAGTGTCTGA 2061

RESULT 3  
US-10-307-047-1

; Sequence 1, Application US/10307047  
; Publication No. US20030206919A1  
; GENERAL INFORMATION:  
; APPLICANT: Matci Sallberg  
; TITLE OF INVENTION: A HEPATITIS C VIRUS NON-STRUCTURAL  
; FILE REFERENCE: TRIPEP.028CPI  
; CURRENT APPLICATION NUMBER: US/10/307,047  
; PRIOR FILING DATE: 2002-11-26  
; PRIOR APPLICATION NUMBER: 60/225,767  
; PRIOR FILING DATE: 2000-08-17  
; PRIOR APPLICATION NUMBER: 60/229,175  
; PRIOR FILING DATE: 2000-08-29  
; PRIOR APPLICATION NUMBER: 09/705,547  
; PRIOR FILING DATE: 2000-11-03  
; PRIOR APPLICATION NUMBER: 09/930591  
; PRIOR FILING DATE: 2001-08-15  
; NUMBER OF SEQ ID NOS: 38  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 1  
; LENGTH: 2061  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Hepatitis C virus NS3/4A coding region  
US-10-307-047-1

Query Match 100.0%; Score 2061; DB 6; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 61 AGCTTGACCGGCGGGGCAAAAACAGGTGAGGGGTGAGGTTCAGATCGTGCACCTGCT 120  
QY 121 GCCCAGACTTTCTTGGCAACTGCAATTAACGGGGTGTGTTGAGACTGTCTACCATGAGCC 180  
Db 121 GCCCAGACTTTCTTGGCAACTGCAATTAACGGGGTGTGTTGAGACTGTCTACCATGAGCC 180  
QY 181 GGAACAGAGCAATTTGCGTACCTTAAGGCTCTGTTATCAGATGTACCAATGTGAC 240  
Db 181 GGAACAGAGCAATTTGCGTACCTTAAGGCTCTGTTATCAGATGTACCAATGTGAC 240  
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Db 481 ACCCGTGAAGTGGCTTAAGCGGTGACCTTATCCCGTAGAGAGCTTAGAGCAACCATG 540  
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Db 1801 TATATACCTGGGCGCTGTCCAGAAATGAATCAACCTTCAGCCCACTCAAGAAATATC 1860  
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Qy 1921 GTTGTGCTGCTTTGGCGCGCTGATTTGCTATCCAGAGCTGTGGTCAATAGAGTACG 1980  
Db 1921 GTTGTGCTGCTTTGGCGCGCTGATTTGCTATCCAGAGCTGTGGTCAATAGAGTACG 1980  
Qy 1981 ATTGTCTGTCCGGAAGCCCGCAATCATACCCGACAGGAAAGTCTCTACCGGAGTTTC 2040  
Db 1981 ATTGTCTGTCCGGAAGCCCGCAATCATACCCGACAGGAAAGTCTCTACCGGAGTTTC 2040  
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Db 2041 GATGAATGGAAGAGTGTCTGA 2061

RESULT 4  
US-10-817-591-16  
; Sequence 16, Application US/10817591  
; Publication No. US20040229832A1  
; GENERAL INFORMATION:  
; APPLICANT: Matti Sallberg  
; APPLICANT: Catharina Hultgren  
; TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND  
; TITLE OF INVENTION: METHODS OF USE THEREOF  
; FILE REFERENCE: TRIPEP.23AUS2C1  
; CURRENT APPLICATION NUMBER: US/10/817,591  
; PRIOR FILING DATE: 2004-04-02  
; PRIOR APPLICATION NUMBER: 10/719,619  
; PRIOR FILING DATE: 2003-11-20  
; PRIOR APPLICATION NUMBER: 10/104,966  
; PRIOR FILING DATE: 2002-03-22  
; PRIOR APPLICATION NUMBER: 09/929,955  
; PRIOR FILING DATE: 2001-08-15  
; PRIOR APPLICATION NUMBER: 09/705,547  
; PRIOR FILING DATE: 2000-11-03  
; PRIOR APPLICATION NUMBER: 60/229,175  
; PRIOR FILING DATE: 2000-08-29  
; PRIOR APPLICATION NUMBER: 60/225,767  
; NUMBER OF SEQ ID NOS: 49  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO: 16  
; LENGTH: 2061  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Hepatitis C virus NS3/4A coding region  
US-10-817-591-16

Query Match 100.0%; Score 2061; DB 8; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

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Db 1 ATGGCGCTATATACAGGCTTATGCCAGAGACAAAGGCGCTTTTGGAGTGCATATACAC 60  
Qy 61 AGCTTGACCGGCGGGACAAAACAGGTGAGGTGAGTTCAATGTGTCAACTGT 120  
Db 61 AGCTTGACCGGCGGGACAAAACAGGTGAGGTGAGTTCAATGTGTCAACTGT 120  
Qy 121 GCCCAGACTTTCTTGGCAACCGCATTAACGGGGGTGTGGAGCTGTACCATGAGGCC 180  
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Qy 241 CAAGACTCTGTAGGCTGCGCTCCCAAGGTGCGCTCATTTAACACATGCACTTGC 300  
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Qy 961 CTGCGCACCGTACCCCTCCGGGCTCGTCACTGTGCCCATCTTAACATCAGAGAGTT 1020  
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Db 1021 GCTCTGTCACTACCGGAGAGATCCCTTTTATGCAAGGCTATTCCTCTGAACAAATT 1080  
Qy 1081 AAGGGGGGAGACATCTCATCTTGTGCACTCAAGAAAGTGCAGAGAGCTCGCGCA 1140





QY 242 AAGACCTGAGAGCTGAGCCGCTCCCAAGAGTCCGCTCATTAACACCATGACTTGG 301  
DB 3636 AAGACTTGAGGCTGAGCCGCTCCGCAAGAGTACGCTCATTTGACACCTGCTCACTTGG 3695  
QY 302 GCTCTCGGACCTTTACCTGTGACAGAGCAGCGAGTCTATTCTGTGCGCGCAAGG 361  
DB 3696 GCTCTCGGACCTTTACCTGTGACAGAGCAGCGAGTCTATTCTGTGCGCGCGG 3755  
QY 352 GAGATGAGGAGGAGCGCTGCTTGGCCCGGAGCTATCTCTACTTTGAAGGCTCTGG 421  
DB 3756 GAGATGAGGAGGAGCGCTGCTGAGCCCGGAGCTTCTACTTTGAAGGCTCTGG 3815  
QY 422 GAGGCGCTCTGCTGAGCCCGAGAGCATGCGTAGAGCATATTAGAGCGCGATAGCA 481  
DB 3816 GGGGTCGCTGTGTGTGCCCCGCGGAGCAGCGGTGGGCAATTGAGGCGCGGTGTGA 3875  
QY 482 CCGGTGAGTGGCTAAAGCGGTGAGCTTCTATCCCGTAGAGAGCTTTAGAGAACCATGA 541  
DB 3876 CCGGTGAGTGGCTAAAGCGGTGAGCTTCTATCCGTGAGAGAACCTTAGAGAACCATGA 3935  
QY 542 GGTCCCGGCTGTTCTCAGACACTCTCCGCAAGAGTGGCCGAGCTACCAAGTGG 601  
DB 3936 GGTCCCGGCTGTTCTCAGACACTCTCTCTCAGAGTGTGCCAGAGCTTCCAGTGG 3995  
QY 602 CCGACCTGAGTCTCCACCGGAGGAGTAAAGAGACCAAGGTCGCGCGCATAGCAG 661  
DB 3996 CCGACCTGAGTCTCCACCGGAGGAGTAAAGAGACCAAGGTCGCGCGCATAGCAG 4055  
QY 662 CTCAGGCTCAAGAGTGTGTGCTCAACCTCTCGGTGCTGCAACATAGGCTTTGGT 721  
DB 4056 CTCAGGCTCAAGAGTGTGTGCTCAACCTCTCGGTGCTGCAACATAGGCTTTGGT 4115  
QY 722 CTATAGTGCAGAGGCCATGAGATTGATCTTAACATCAGAGCTGAGGAGAGCAATTA 781  
DB 4116 CTATAGTGCAGAGGCCATGAGATTGATCTTAACATCAGAGCTGAGGAGAGCAATTA 4175  
QY 782 CTACTGAGAGCCGATCAAGTATTCACAGGAGTTCCTTGGCCGAGCGGAGTGT 841  
DB 4176 CTACTGAGAGCCGATCAAGTATTCACAGGAGTTCCTTGGCCGAGCGGAGTGT 4235  
QY 842 CAGGAGGCTGCTTATGACATTAATTGAGAGAGTGCATTCACGAGTGCACATCCA 901  
DB 4236 CAGGAGGCTGCTTATGACATTAATTGAGAGAGTGCATTCACGAGTGCACATCCA 4295  
QY 902 TCTTGGGAGTGGACCTGTCTTGAACAGAGAGCGGAGGAGAGCTGAGCTGTGC 961  
DB 4296 TCTTGGGAGTGGACCTGTCTTGAACAGAGAGCGGAGGAGAGCTGAGCTGTGC 4355  
QY 962 TCGCAGACGCTACCCCTCCGAGCTCGTCACTGTGCCCATCTTAACATCAGAGGTTG 1021  
DB 4356 TCGCAGACGCTACCCCTCCGAGCTCGTCACTGTGCCCATCTTAACATCAGAGGTTG 4415  
QY 1022 CTCTGTCCACTACCGAGAGATCCCTTTTATGAGCAAGGCTATTCCCTTGAAGCAATTA 1081  
DB 4416 CTCTGTCCACTACCGAGAGATCCCTTTTATGAGCAAGGCTATTCCCTTGAAGCAATTA 4475  
QY 1082 AGGGGAGGAGATCATCTTCTGCACTCAAGAGAGAGGAGCAGAGCTGCGCGCA 1141  
DB 4476 AGGGGAGGAGATCATCTTCTGCACTCAAGAGAGAGGAGCAGAGCTGCGCGCA 4535  
QY 1142 AACTGTCGCTTGGGCGTCAATGCGCTGCTTACTACGCGGCTTGTGTGCTGCTCA 1201  
DB 4536 AACTGTCGCTTGGGCGTCAATGCGCTGCTTACTACGCGGCTTGTGTGCTGCTCA 4595  
QY 1202 TCCGACCAAGTGTGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1261  
DB 4596 TCCGACCAAGTGTGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4655  
QY 1262 GCGACTTGATTCGAGATAGACTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1321  
DB 4656 GCGACTTGATTCGAGATAGACTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4715  
QY 1322 TTGACCTTACCTTACCATTTGAGACATCAAGCTTCCCGAGAGTGTGTGTGTGTGTGTGT 1381

DB 4716 TTGACCTTACCTTACCATTTGAGACATCAAGCTTCCCGAGAGTGTGTGTGTGTGTGTGT 4775  
QY 1382 AACGTCGGGAGTGAAGCTGAGAGGAGAGCCAGAGCTTACAGATTTGTGTGTGTGTGTGTGT 1441  
DB 4776 AACGTCGGGAGTGAAGCTGAGAGGAGAGCCAGAGCTTACAGATTTGTGTGTGTGTGTGTGT 4835  
QY 1442 AGCGCTCTTGGAGCTGTTGACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1501  
DB 4836 AGCGCTCTTGGAGCTGTTGACTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4895  
QY 1502 CTGTGTATGAGCTTACGCGCCCGAGAGCAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1561  
DB 4896 CTGTGTATGAGCTTACGCGCCCGAGAGCTTACAGATTTGTGTGTGTGTGTGTGTGTGTGTGTGT 4955  
QY 1562 CCGGACTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1621  
DB 4956 CCGGCTTCCGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5015  
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DB 5016 CCGCATAGAGCGCCACTTCTATCCAGAGCAAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5075  
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DB 5076 TGTAGCGTACCAAGCCAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5135  
QY 1742 AGATGTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1801  
DB 5136 AGATGTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5195  
QY 1802 ATGAGCTGGGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1861  
DB 5196 ATGAGCTGGGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5255  
QY 1862 TGACATGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1921  
DB 5256 TGACATGTATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5315  
QY 1922 TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1981  
DB 5316 TTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5375  
QY 1982 TTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2041  
DB 5376 TTGTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5435  
QY 2042 ATGAATGAAAGTGTCT 2059  
DB 5436 ATGAATGAAAGTGTCT 5453

RESULT 7  
US-10-445-724-1  
; Sequence 1, Application US/10445724  
; Publication No. US20040101829A1  
; GENERAL INFORMATION:  
; APPLICANT: STAPLETON, JACK T.  
; APPLICANT: MÜNSCHMANN, SABINA  
; TITLE OF INVENTION: A PROTEIN THAT INTERACTS WITH LIPIDS AND  
; FILE REFERENCE: IOWA:045US  
; CURRENT APPLICATION NUMBER: US/10/445,724  
; CURRENT FILING DATE: 2003-05-27  
; PRIOR APPLICATION NUMBER: 60/392,158  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 9401  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
; FEATURE:

NAME/KEY: CDS  
LOCATION: (342) .. (9374)  
US-10-445-724-1

Query Match 86.7%; Score 1786; DB 7; Length 9401;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

QY 2 TGGCCCTATCAACGGCTATGCGGAGAGAGAGGGGCGCTTTGGGAGCATATACCA 61  
DB 3418 TGGCCCTATCAACGGCTATGCGGAGAGAGAGGGGCGCTTTGGGAGCATATACCA 3477  
QY 62 GCTTACCGGCGGAGCAAAAACCAAGTGAAGGTGAGATTGATGATGATGATGATG 121  
DB 3478 GCTTACCGGCGGAGCAAAAACCAAGTGAAGGTGAGATTGATGATGATGATGATG 3537  
QY 122 CCCAGACTTTCTTGGCAACTGATATTAACGGGGTGTGTGACGTGTCTAACATGAGCCG 181  
DB 3538 CCCAAACCTTCTGCGCAAGTCAATCAATGGGGTGTGTGACGTGTCTAACAGGGGCGG 3597  
QY 182 GAACAAAGACCAATGCGTCACTTAAGGGCTGTATTCAGATGTACACCAATGTGACCC 241  
DB 3598 GAACAAAGACCAATGCGTCACTTAAGGGCTGTATTCAGATGTACCAATGTGAGACC 3657  
QY 242 AAGACCTGTAGGCTGCGCGCTCCCAAGTGCCTCATTAACCATGCACTTGGC 301  
DB 3658 AAGACCTGTAGGCTGCGCGCTCCCAAGTGCCTCATTAACCATGCACTTGGC 3717  
QY 302 GCTCTCGGACCTTTACCTGTACAGAGGACCGGATGATCTCTGTGCGGAGCGG 361  
DB 3718 GCTCTCGGACCTTTACCTGTGTACAGAGGACCGGATGATCTCTGTGCGGAGCGG 3777  
QY 352 GTGATGAGAGGGGAGCGCTTGTGCGCGGCGCTATCTTTAATTGAAAGCTCTGG 421  
DB 3778 GTGATGAGAGGGGAGCGCTTGTGCGCGGCGCTATCTTTAATTGAAAGCTCTGG 3837  
QY 422 GAGGCGCTGTGCTGAGCGCGAGGACATGCGGTAGGACATTTAGAGCGGGATGCA 481  
DB 3838 GAGGCGCTGTGCTGAGCGCGAGGACATGCGGTAGGACATTTAGAGCGGGATGCA 3897  
QY 482 CCGGTGAGAGTGTAAAGGCGGTGACCTTCACTCCGTAGAGAGCTTGAAGAACATGA 541  
DB 3898 CCGGTGAGAGTGTAAAGGCGGTGACCTTCACTCCGTAGAGAGCTTGAAGAACATGA 3957  
QY 542 GGTCCCCGGGTGTTCTACAGCACTCTCCCAACAGAGTGCCTCCAGAGCTACAGATG 601  
DB 3958 GGTCCCCGGGTGTTCTACAGCACTCTCTCCCAACAGATGTGCCTCCAGAGCTTCA 4017  
QY 602 CCCACTGATGCTCCCAACGGGAGGGTAAAGAGCAACAGGTCCCGGCGGATAGCAG 661  
DB 4018 CCCACTGATGCTCCCAACGGGAGGGTAAAGAGCAACAGGTCCCGGCGGATAGCAG 4077  
QY 662 CTGAGGGCTAAAGGTGCTGCTCAACCCCTCGGTGCTGCAACATGAGGCTTTGGT 721  
DB 4078 CTGAGGGCTAAAGGTGCTGCTCAACCCCTCGGTGCTGCAACATGAGGCTTTGGT 4137  
QY 722 CTTAATGTCGAAGGCGGCAATGATGATCTTAACATGAGACTGGGGTGAAGCAATTA 781  
DB 4138 CTTAATGTCGAAGGCGGCAATGATGATCTTAACATGAGACTGGGGTGAAGCAATTA 4197  
QY 782 CTACTGGAGCGGATCACTATTCACCTTAAGGCAAGTTCTTGGCGAGCGGGGTGT 841  
DB 4198 CTACTGGAGCGGATCACTATTCACCTTAAGGCAAGTTCTTGGCGAGCGGGGTGT 4257  
QY 842 CAGGGGGGTCTTATGACATTAATTTTGTGAGAGTGCATCCAGATGCAATCA 901  
DB 4258 CAGGGGGGTCTTATGACATTAATTTTGTGAGAGTGCATCCAGATGCAATCA 4317  
QY 902 TCTTGGGAGATTGGCACTGTCTTTGACCAAGCAAGACCGGGGGGAGACATGACTGTG 961  
DB 4318 TCTTGGGAGATTGGCACTGTCTTTGACCAAGCAAGACCGGGGGGAGACATGACTGTG 4377  
QY 962 TCGCCACGCGTACCCCTCGGGCTCGGTCACTGTGCCCATCTTAACATGAGAGGTG 1021

DB 4378 TCGCCACGCGCACCCCTCGGGCTCGTCACTGTGCCCATCCCAATCGAGAGGTG 4437  
QY 1022 CTCTGTCCATACCGGAGAGATCCCTCTTTATGGAAGCTATTCCTTTGAAGCAATTA 1081  
DB 4438 CTCTGTCCATACCGGAGAGATCCCTCTTTATGGAAGCTATTCCTTTGAAGCAATTA 4497  
QY 1082 AGGGGGGAGACATCTCTTCTGCACTCAAAAGAAAGTGCAGAGCTGCGCGCA 1141  
DB 4498 AGGGGGGAGACATCTCTTCTGCACTCAAAAGAAAGTGCAGAGCTGCGCGCA 4557  
QY 1142 AACTGTGCGGTGGGGCTCAATGCGGTGCTTACTACCGGGCTTGAATGTGCTGCTCA 1201  
DB 4558 AACTGTGCGGTGGGGCTCAATGCGGTGCTTACTACCGGGCTTGAATGTGCTGCTCA 4617  
QY 1202 TCCGACCAAGTGTACGTTGTCTGTGAGCACTGAGAGCTTCAATGACCGGCTTACG 1261  
DB 4618 TCCGACCAAGTGTACGTTGTCTGTGAGCACTGAGAGCTTCAATGACCGGCTTACG 4677  
QY 1262 GCGACTTGATTCGGTGAATGACTGCAACAGTGTGCAACCGAGAGTGCATTCAGCC 1321  
DB 4678 GCGACTTGATTCGGTGAATGACTGCAACAGTGTGCAACCGAGAGTGCATTCAGCC 4737  
QY 1332 TTGACCTTAACCTTCACTTGAAGCAATCAAGCTTCCCAAGATGCTGTCTCCGTATCT 1381  
DB 4738 TTGACCTTAACCTTCACTTGAAGCAATCAAGCTTCCCAAGATGCTGTCTCCGTATCT 4797  
QY 1382 AAGCTGGGGTGAAGCTGCGAGAGGAAAGCAAGGACTTCAAGATTTGTGGACCGGGG 1441  
DB 4798 AAGCTGGGGTGAAGCTGCGAGAGGAAAGCAAGGACTTCAAGATTTGTGGACCGGGG 4857  
QY 1442 AGCGTCTTCTGGGACATGTTTGAATGCTGTGCTCTCTGAGAGTGTATGACGGGGTGTG 1501  
DB 4858 AGCGTCTTCTGGGACATGTTTGAATGCTGTGCTCTCTGAGAGTGTATGACGGGGTGTG 4917  
QY 1502 CTTGTATGAGCTTACGCGCGCGAGACCAAGTATGAGCTATGAGCATATGAAACACC 1561  
DB 4918 CTTGTATGAGCTTACGCGCGCGAGACCAAGTATGAGCTATGAGCATATGAAACACC 4977  
QY 1562 CGGACCTTCCGTGTGCAAGACCATCTTGAATTTTGGAGGGGCTCTTACGGGTCTCA 1621  
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QY 1622 CCCACTGAGCGCCACTTCCATCCAGACCAAGAGAGTGGGGAAACCTTCCCTATC 1681  
DB 5038 CCCACTGAGCGCCACTTCCATCCAGACCAAGAGAGTGGGGAAACCTTCCCTATC 5097  
QY 1682 TGTAGCGTACCAACCAACCGGTGCGGTAGAGCTCAAGCCCTCCCGTGTGGAGC 1741  
DB 5098 TGTAGCGTACCAACCAACCGGTGCGGTAGAGCTCAAGCCCTCCCGTGTGGAGC 5157  
QY 1742 AGATGTGAAGTGTGATTCGTCTCAAGCCCACTTCAATGAGGCGCAACCTCTGTCT 1801  
DB 5158 AGATGTGAAGTGTGATTCGTCTCAAGCCCACTTCAATGAGGCGCAACCTCTGTCT 5217  
QY 1802 ATAGAATGGGGCTGTCCAGAAATGAAGTCAACCTGAGCAACCAAGTCAACAGTATTA 1861  
DB 5218 ATAGAATGGGGCTGTCCAGAAATGAAGTCAACCTGAGCAACCAAGTCAACAGTATTA 5277  
QY 1862 TGAATGATGTGCGCTGACCTGAGAGTGTGACAGAGTACCTGAGTGTGCTGTGGCGGG 1921  
DB 5278 TGAATGATGTGCGCTGACCTGAGAGTGTGACAGAGTACCTGAGTGTGCTGTGGCGGG 5337  
QY 1922 TTTGCGCTGCTTTGGCGCGGTATTTGCTTATCAAGGCTGCTGTATGATGATGATGA 1981  
DB 5338 TTTGCGCTGCTTTGGCGCGGTATTTGCTTATCAAGGCTGCTGTATGATGATGATGA 5397  
QY 1982 TTTGCTTGTCCGGAAGCGGCAATCATACCGGAGGGAAGTCTTACCGGAGTTCG 2041  
DB 5398 TTTGCTTGTCCGGAAGCGGCAATCATACCGGAGGGAAGTCTTACCGGAGTTCG 5457  
QY 2042 ATGAATGGAAGTGTCT 2059

Db 5458 ATGAGATGAGAGTGTCT 5475

RESULT 8  
US-09-881-239-2  
; Sequence 2, Application US/09881239  
; Publication No. US20020192639A1  
; GENERAL INFORMATION:  
; APPLICANT: CHIEN, David Y  
; APPLICANT: ARCHANGE, Phillip  
; APPLICANT: TANDESK, Laura  
; APPLICANT: GEORGE-NASCIMENTO, Carlos  
; APPLICANT: COIT, Doris  
; APPLICANT: MEDINA-SELBY, Angelica  
; TITLE OF INVENTION: KEY ANTIGEN/ANTIBODY COMBINATION ASSAY  
; FILE REFERENCE: 2302-16073 / P16073.003  
; CURRENT APPLICATION NUMBER: US/09/881,239  
; NUMBER OF SEQ ID NOS: 8  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 2  
; LENGTH: 2058  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:  
; NAME/KEY: CDS  
; LOCATION: (1)..(2058)  
US-09-881-239-2

Query Match 86.4%; Score 1781.2; DB 3; Length 2058;  
Beet Local Similarity 91.6%; Pred. No. 0; Mismatches 173; Indels 0; Gaps 0;  
Matches 1885; Conservative 0;

Qy 1 ATGGCGCTTATCAGCGCTTATGCCCCAGACAGAGAGGCGCTTTTGGAGATGATAATCAC 60  
Db 1 ATGGCGCCCATACAGCGCGTATGCCCCAGACAGAGAGGCGCTTCTGAGGATATATCAC 60

Qy 61 AGCTTGACCGCGCGGAGCAAAAACAGGTGAGAGGTGAGTTCAATCTGCTCAACTGCT 120  
Db 61 AGCTTAATCTGCGCGGAGCAAAAACAGGTGAGAGGTGAGTTCAATCTGCTCAACTGCT 120

Qy 121 GCCCAAGCTTTCTTGAGCAACTGCAATTAAGGGGTGTGTGAGCTGTACCATGAGAGCC 180  
Db 121 GCCCAAGCTTTCTTGAGCAACTGCAATTAAGGGGTGTGTGAGCTGTACCATGAGAGCC 180

Qy 121 GCGCAAGCTTTCTTGAGCAACTGCAATTAAGGGGTGTGTGAGCTGTACCATGAGAGCC 180  
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Qy 181 GGAACAGGACCATTTGCGTCACTTAAGGGTCTGTATTCAGATGATACCAATGTGAGC 240  
Db 181 GGAACAGGACCATTTGCGTCACTTAAGGGTCTGTATTCAGATGATACCAATGTGAGC 240

Qy 241 CAAAGACTGTGAGGTGCGCGCGCTCCCAAGGTGCGCGCTCAATTAACACCATGCACTTGC 300  
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Db 241 CAAAGACTGTGAGGTGCGCGCGCTCCCAAGGTGCGCGCTCAATTAACACCATGCACTTGC 300

Qy 301 GGCCTCTGAGGACCTTTACTGTGCAAGAGGCAAGCGAGTCACTCTGTGCGCGAGAGG 360  
Db 301 GGCCTCTGAGGACCTTTACTGTGCAAGAGGCAAGCGAGTCACTCTGTGCGCGAGAGG 360

Qy 361 GGTGATGAGGAGGAGCGCTGCTTTGCGCGCGCTTATCTTACTTTGAAAGGCTCTGCG 420  
Db 361 GGTGATGAGGAGGAGCGCTGCTTTGCGCGCGCTTATCTTACTTTGAAAGGCTCTGCG 420

Qy 421 GAGAGCGCTCTGCTGTGCGCGCGAGAGCAATGCGGTGAGGATTTCAAGAGCGCGGTATGC 480  
Db 421 GAGAGCGCTCTGCTGTGCGCGCGAGAGCAATGCGGTGAGGATTTCAAGAGCGCGGTATGC 480

Qy 481 ACCCGTGAAGTGGCTTAAGGCGGTGAGCTTCAATCCCGTGAAGAGCTTGAAGCAACATG 540  
Db 481 ACCCGTGAAGTGGCTTAAGGCGGTGAGCTTCAATCCCGTGAAGAGCTTGAAGCAACATG 540

Qy 541 AGGTCCCGGTGTTCTCAAGCAACTCTTCCAGCAGAGTGCCTCCAGAGCTTACCAAGTG 600  
Db 541 AGGTCCCGGTGTTCTCAAGCAACTCTTCCAGCAGAGTGCCTCCAGAGCTTACCAAGTG 600

Db 541 AGGTCCCGGTGTTCTCAAGCAACTCTTCCAGCAGAGTGCCTCCAGAGCTTACCAAGTG 600  
Qy 601 GCCCACTGATGCTCTCCACCGGAGCGGTAAAGACCAAGGTGCGCGCGATATACCA 660  
Db 601 GCTCACTTCATGCTCTCCACCGGAGCGGTAAAGACCAAGGTGCGCGCGATATATGCA 660

Qy 661 GCTCAAGGCTCAAGAGTGTGTGCTCAACCGCTCGTTGCTGCAACAATGGGCTTTGGT 720  
Db 661 GCTCAAGGCTCAAGAGTGTGTGCTCAACCGCTCGTTGCTGCAACAATGGGCTTTGGT 720

Qy 721 GCTTACATGTCGAAGGCGCATATGATGATCTTAACATCAGAGCTGGGGTGAACAAT 780  
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Qy 841 TCAAGGGGTGCTTATGACATTAATAATTTGTGACAGAGTCCCACTCCAGATGCAATCC 900  
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Qy 901 ATCTTGGCATTTGACATGCTCTTGAACCAAGCAAGACCGCGGGGCGAGACTGTG 960  
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Qy 961 CTGCGCAACCGCTACCGCTCGCGGCTCGCTCACTGTGCGCCATCTTAATGAGAGGTT 1020  
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Qy 1021 GCTCTGTCCATACCGAGAGATCCCTTTATGAGCAAGGCTATCCCTTGAACCAAT 1080  
Db 1021 GCTCTGTCCATACCGAGAGATCCCTTTATGAGCAAGGCTATCCCTTGAACCAAT 1080

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Qy 1141 AAACGTGTGCGGTGGGGGTCAATGCGGTGCTTAATACCGCGCTTGAATGTGCGCT 1200  
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Db 1201 ATCCGACCAAGTGGAGCTGTGCTGCTGAGCACTGACGCGCTCATGACCGGCTTTAT 1260

Qy 1261 GCGCACTTGAATGCGGTGATGAGCTGCAATGAGTGTGACCCAGACAGTCAATTTGAC 1320  
Db 1261 GCGCACTTGAATGCGGTGATGAGCTGCAATGAGTGTGACCCAGACAGTCAATTTGAC 1320

Qy 1321 CTGACCCCTTACCTTCAACATGAGACATCAACGCTTCCCGAGAGTGTCTCCGCTCT 1380  
Db 1321 CTGACCCCTTACCTTCAACATGAGACATCAACGCTTCCCGAGAGTGTCTCCGCTCT 1380

Qy 1381 CAAAGTGGGGTGAAGCTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1440  
Db 1381 CAAAGTGGGGTGAAGCTGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 1440

Qy 1441 GAGCGTCTTGTGAGTGTGATGCTGTGTCTCTGCGAGTGTATGAGCGGGGTGT 1500  
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Qy 1501 GCTTGTATGAGCTTAAGCGCGCGCGAGACCAAGTGAAGCTTAAGGAGTGAACACC 1560  
Db 1501 GCTTGTATGAGCTTAAGCGCGCGCGAGACCAAGTGAAGCTTAAGGAGTGAACACC 1560

Qy 1561 CCGGACTTCCCGTGTGCAAGACCATTTAATTTTGGAGGAGGCTTTTACCGGCTTC 1620  
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Qy 1621 ACCCATATGAGCGCCCATCTTATCCAGCAAAAGCAGAGTGGGAGAAACCTTCTTAT 1680  
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Db 1201 ATCCGCCCATCGGGAGATGTTTCCTCGTGGCAACCATGCCCCATATGACCGGGCTATAC 1260
Oy 1261 GCGCATCTTGATTCGGGTATGATGCAACACGTGTGTCAACCAAGACAGTGCATTCCAGC 1320
Db 1261 GCGCATCTTGATTCGGGTATGATGCAACATGCTGTGTCAACCAAGACAGTGCATTCCAGC 1320
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Db 1321 CTGTCACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCTTACCT 1380
Oy 1381 CAACGTCGGGTATGATGATGCAACATGCAAGCTTCCCGAGAGTGTCTCTCCGCTCT 1440
Db 1381 CAACGTCGGGTATGATGATGCAACATGCAAGCTTCCCGAGAGTGTCTCTCCGCTCT 1440
Oy 1441 GAGCGTCTTCTGCGATGTTTGAATCTGTCTGTCTGTCTGTCTGTCTGTCTGTCTGTCT 1500
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Oy 1561 CCGGAGCTTCCCGTGTGCGAAGACATCTTGAATTTTGGAGGGGCTTTTACGGGCTTC 1620
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Oy 1621 ACCCATATGACGCCCATCTTCTATCCAGACAAAGACAGAGTGGGAAAACCTTCCCTAT 1680
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Oy 1681 CTGGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1740
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Oy 1741 CAGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1800
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Oy 1861 ATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATGATG 1920
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Oy 1921 GTTCTGCTGCTTGTGGCCGCTATGCTATCCAGACGCTGCTGCTATGATGATG 1980
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Oy 1981 ATTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTG 2040
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Oy 2041 GATGAATGGAAGATGC 2058
Db 2041 GATGAATGGAAGATGC 2058
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RESULT 10
US-10-658-782-1
; Sequence 1, Application US/10658782
; Publication No. US20040142321A1
; GENERAL INFORMATION:
; APPLICANT: ARCANDEL, Phillip
; APPLICANT: CHEN, David Y.
; TITLE OF INVENTION: HCV ASSAY
; FILE REFERENCE: 2300-19199
; CURRENT APPLICATION NUMBER: US/10/658,782
; CURRENT FILING DATE: 2003-09-08
; PRIOR APPLICATION NUMBER: 60/409,515
; PRIOR FILING DATE: 2002-09-09
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; NUMBER OF SEQ ID NOS: 9
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 1
; LENGTH: 2058
; TYPE: DNA
; ORGANISM: Artificial
; FEATURE:
; OTHER INFORMATION: NS3/41 conformational epitope DNA sequence
US-10-658-782-1

Query Match      86.4%; Score 1781.2; DB 7; Length 2058;
Beet Local Similarity 91.6%; Pred. No. 0;
Matches 1885; Conservative 0; Mismatches 173; Indels 0; Gaps 0;

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Oy 541 AGTCCCGGGGTCTTCAAGACCTTCCACAGAGTGGCCGACAGCTACCAAGT 600
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US-10-637-323-1  
; Sequence 1, Application US/10637323  
; Publication No. US20040063092A1  
; GENERAL INFORMATION:  
; APPLICANT: CHIEN, David Y.  
; APPLICANT: ARANGEL, Phillip  
; APPLICANT: TANDESKE, Laura  
; APPLICANT: GEORGE-MASCIENTO, Carlos  
; APPLICANT: COLT, Doris  
; APPLICANT: MEDINA-SELBY, Angelica  
; TITLE OF INVENTION: IMMUNOSAYS FOR ANTI-HCV ANTIBODIES  
; FILE REFERENCE: 2302-17039 / PPI7039.002  
; CURRENT APPLICATION NUMBER: US/10/637,323  
; CURRENT FILING DATE: 2003-08-08  
; PRIOR APPLICATION NUMBER: US/09/881,654  
; PRIOR FILING DATE: 2001-06-14  
; PRIOR APPLICATION NUMBER: 60/212,082  
; PRIOR FILING DATE: 2000-06-15  
; PRIOR APPLICATION NUMBER: 60/280,811  
; PRIOR FILING DATE: 2001-04-02  
; PRIOR APPLICATION NUMBER: 60/280,867  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: Patent Ver. 2.0  
; SEQ ID NO 1  
; LENGTH: 2058  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:

OTHER INFORMATION: representative NS3/4a conformational antigen  
FEATURE:  
NAME/KEY: CDS  
LOCATION: (1).. (2058)  
US-10-637-323-1

Query Match 86.3%; Score 1779.6; DB 7; Length 2058;  
Best Local Similarity 91.5%; Pred. No. 0;  
Matches 1884; Conservative 0; Mismatches 174; Indels 0; Gaps 0;

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DB 1 ATGGGCGCTATACGCGCTATATGCGAGACAGAGGCGCTTTGGATGATATACAC 60  
QY 61 AGCTTGACCGGCGGAGCAAAAACAGGTGAGGTTGAGTTCAATGTCATCTGT 120  
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DB 1501 GGTGTGTATGAGCTTACGCGCGGAGAGCAACAGTTAGGCTACGAGCATGAGAACACC 1560  
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QY 1681 CTGTGAGGTATCAAGACCAACCGTGTGAGTCAAGGCGGCTCCCGCTGTGGAGAC 1740  
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QY 1741 CAGATGTGAAGTGTGATCGTCTCAAGCCCACTCTCAATGAGGCGCAACCTCTGTCTA 1800  
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QY 1801 TATAGACTGGGCGCTGTCAAGATGAGTCAACCTTGAAGCAACCACTCAACAGTATATC 1860  
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QY 2041 GATGAATGAGAGATGC 2058  
Db 2041 GATGAGATGAGAGATGC 2058

RESULT 13  
US-10-899-715-1  
; Sequence 1, Application US/10899715  
; Publication No. US20040265801A1  
; GENERAL INFORMATION:  
; APPLICANT: CHEN, David Y.  
; APPLICANT: ARCANDEL, Phyllip  
; APPLICANT: TANDESKE, Laura  
; APPLICANT: GEORGE-NASCIMENTO, Carlos  
; APPLICANT: COLT, Doris  
; APPLICANT: MEDINA-SELBY, Angelica  
; TITLE OF INVENTION: IMMUNOSSAYS FOR ANTI-HCV ANTIBODIES  
; FILE REFERENCE: 2302-17039 / PPI7039.002  
; CURRENT APPLICATION NUMBER: US/10/899,715  
; CURRENT FILING DATE: 2004-07-26  
; PRIOR APPLICATION NUMBER: US/09/881,654  
; PRIOR FILING DATE: 2001-06-14  
; PRIOR APPLICATION NUMBER: 60/212,082  
; PRIOR FILING DATE: 2000-06-15  
; PRIOR APPLICATION NUMBER: 60/280,811  
; PRIOR FILING DATE: 2001-04-02  
; PRIOR APPLICATION NUMBER: 60/280,867  
; NUMBER OF SEQ ID NOS: 7  
; SOFTWARE: Patent In Ver. 2.0  
; SEQ ID NO 1  
; LENGTH: 2058  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence:  
; OTHER INFORMATION: representative NS3/4a conformational antigen  
; NAME/KEY: CDS  
; LOCATION: (1)..(2058)  
US-10-899-715-1

Query Match 86.3%; Score 1779.6; DB 8; Length 2058;  
Best Local Similarity 91.5%; Pred. No. 0;  
Matches 1884; Conservative 0; Mismatches 174; Indels 0; Gaps 0;

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Db 421 GAGGCGCTCTGTGTGTGCGCGGACAGCGCGGATATTCAGAGCGCGGATGC 480

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Db 481 ACCGCTGAGATGCTTAAGCGGCTGATTCATCCCGGTAGAGAGCTTAAGACAAACATG 540

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QY 601 GCCACCTGATGCTCCACAGGCGGAGTAAAGACAAAGTCCCGGAGCATATGCA 660  
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 DB 1681 CTGGTAGCTACCAAGCCACCGTGTGCCGCTAGAGCTCAAGCCCTCCCGCTGTGGAGC 1740  
 QY 1741 CAGATGTGGAAGTGTGATTCGCTCAAGCCCACTTCATGGGCAACACCTTCTGCTA 1800  
 DB 1741 CAGATGTGGAAGTGTGATTCGCTCAAGCCCACTTCATGGGCAACACCTTCTGCTA 1800  
 QY 1801 TATTAACATGGGGCGCTGTCCAGATATGAATCAACCTTGAACCAACCAAGTATATC 1860  
 DB 1801 TACAGATCTGGGCGCTGTTCAGATATGAATCAACCTTGAACCAACCAAGTATATC 1860  
 QY 1861 ATGACATGTATGTGGCTGACCTGAGAGTGTGTCAAGAGTACCTGGGTGCTGTTGGCGGC 1920  
 DB 1861 ATGACATGTATGTGGCTGACCTGAGAGTGTGTCAAGAGTACCTGGGTGCTGTTGGCGGC 1920  
 QY 1921 GTTCTGTGCTGCTTTGGCGCGTATTTGCTATCCACAGGCTGGGTGCTATGATGAGTAG 1980  
 DB 1921 GTTCTGTGCTGCTTTGGCGCGTATTTGCTATCCACAGGCTGGGTGCTATGATGAGTAG 1980  
 QY 1981 ATTGTCTTTCGGGAAAGCGGCAATCATACCCGACAGGAGAGTCTCTTACCGGAGTTC 2040  
 DB 1981 ATTGTCTTTCGGGAAAGCGGCAATCATACCCGACAGGAGAGTCTCTTACCGGAGTTC 2040  
 QY 2041 GATGAATGGAAGAGTGC 2058  
 DB 2041 GATGAATGGAAGAGTGC 2058

TELECOMMUNICATION INFORMATION:  
 TELEPHONE: 314-727-5188  
 TELEFAX: 314-727-6092  
 INFORMATION FOR SEQ ID NO: 5:  
 SEQUENCE CHARACTERISTICS:  
 LENGTH: 12980 base pairs  
 TYPE: nucleic acid  
 STRANDEDNESS: double  
 TOPOLOGY: linear  
 MOLECULE TYPE: cDNA  
 HYPOTHEICAL: NO  
 ANTI-SENSE: NO  
 US-09-238-076-5

Query Match 86.1%; Score 1774.8; DB 3; Length 12980;  
 Best Local Similarity 91.4%; Pred. No. 0; Mismatches 177; Indels 0; Gaps 0;  
 Matches 1881; Conservative 0;

2 TGGCCCTATATGACGCTATGCGCCAGACAGAGGAGCTTTTGGATGATATATACCA 61  
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 QY 62 GCTTGAACCGCCGGGACAAAAACAGGTGAGAGGTGAGGTTCAGATCGTGTCAACTGCTG 121  
 DB 3478 GCTTGAACCGCCGGGACAAAAACAGGTGAGAGGTGAGGTTCAGATCGTGTCAACTGCTG 3537  
 QY 122 CCCAATCTTCTTGGCAACCTGCAATTAACGGGGTGTGTGACCTGTCTTCAATGAGCGC 181  
 DB 3538 CCCAATCTTCTTGGCAACCTGCAATTAACGGGGTGTGTGACCTGTCTTCAATGAGCGC 3597  
 QY 182 GAACAAGACCAATTCCTGACCTTAAGAGTCTGTTATCAAGATGACCAATGATGAGC 241  
 DB 3538 GAACAAGACCAATTCCTGACCTTAAGAGTCTGTTATCAAGATGACCAATGATGAGC 3657  
 QY 242 AAGACTGTGAGTGTGCGCCGCTCCCAAGGTGCGCTCATTAACACCATGCACTTGGC 301  
 DB 3658 AAGACTGTGAGTGTGCGCCGCTCCCAAGGTGCGCTCATTAACACCATGCACTTGGC 3717  
 QY 302 GCTCTCCGACCTTTAATCTGTGACAGAGGACGCGGATGTATTCCTGTGCGCGACGGG 361  
 DB 3718 GCTCTCCGACCTTTAATCTGTGACAGAGGACGCGGATGTATTCCTGTGCGCGACGGG 3777  
 QY 362 GTGATGAGAGGAGGAGCGCTTGTGCGCCCGGCTATCTTACTTGAAGGCTCTCGG 421  
 DB 3778 GTGATGAGAGGAGGAGCGCTTGTGCGCCCGGCTATCTTACTTGAAGGCTCTCGG 3837  
 QY 422 GAGGCTCTGTGCTGTGCCCCCGAGGACATGCCGTAGGAGATTTAGAGCCGCGGTATGCA 481  
 DB 3838 GAGGCTCTGTGCTGTGCCCCCGAGGACATGCCGTAGGAGATTTAGAGCCGCGGTATGCA 3897  
 QY 482 CCCGTGAGAGTGTAAAGCGGTGACCTTCAATCCCGTGAAGAGCTTAAGACCAACATGA 541  
 DB 3898 CCCGTGAGAGTGTAAAGCGGTGACCTTCAATCCCGTGAAGAGCTTAAGACCAACATGA 3957  
 QY 3898 CCCGTGAGAGTGTAAAGCGGTGACCTTCAATCCCGTGAAGAGCTTAAGACCAACATGA 3957  
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 DB 3958 GATCCCGGATTTCTACAGCAATCTCTCTCCCAACAGAGTGCAGAGCTTCAAGTGG 4017  
 QY 602 CCCACCTGATGCTTCCACCGGACGAGGTAAAGAGCAACAGGTCTCCGCGCATACGAG 661  
 DB 4018 CCCACCTGATGCTTCCACCGGACGAGGTAAAGAGCAACAGGTCTCCGCGCATACGAG 4077  
 QY 662 CTCAGGGCTACAGAGTGTGTGCTCAACCCCTCGTGTCTGCAACATGGGCTTTGGTG 721  
 DB 4078 CCCAGGGCTACAGAGTGTGTGCTCAACCCCTCGTGTCTGCAACATGGGCTTTGGTG 4137  
 QY 722 CTTACATGCTCAAGGCGCCATGGATTTGATCTTACATGAGAGCTGGGTGAGACAATTA 781  
 DB 4138 CTTACATGCTCAAGGCGCCATGGGTGATCTTATATGAGACCGGGGTGAGACAATTA 4197  
 QY 782 CTAAGTGAAGCCGATGACGATTTACCATGAGGAGTTCCTTGCAGACGGCGGCTGT 841  
 DB 4198 CCACTGGAGCCCATGACGATCTCACTACCTGAGGAGGAGTTCCTTGCAGACGGCGGCTGT 4257



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DB 4258 CAGGAGGCTCTATGATATATTTGAGAGAGCCATCCAGATGCAATCA 4317  
QY 902 TCTTGGGCAATGAGCTGTCTTGAACAAGAGACCGGGGGGAGAGTACTGTGC 961  
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DB 4318 TCTTGGGCAATGAGCTGTCTTGAACAAGAGACCGGGGGGAGAGTACTGTGC 4377  
QY 962 TGGCCACCGCTACCCCTCGGGCTCGGTACATGTGCCCCATCTTAACATCGAGAGGTTG 1021  
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DB 4438 CTCTGCACTACCGGAGAGATCCCTTTATGAGCAAGGCTATTCCTTGAAGGATCA 4497  
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| | | | |  
DB 4498 AGGGGGGAGAGATCTGATCTTCTGCACTAAAGAGAGTGCAGAGCTGCGCA 4557  
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| | | | |  
DB 4558 AACTGTGCGCTTGGGGCTGCAATGCGGTGGCTTAATACCGGGCTTGAATGTCCGTCA 4617  
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| | | | |  
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| | | | |  
DB 4678 GCGACTTGGATTCGGGTATGAGCTGCAACAGCTGTGTCAACGAGTGAAGCTTCAAGCC 4737  
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DB 4738 TTGACCCCTTACCTTGAACAATAGCTTCCCAAGATGTGTCTCCGTAATC 4797  
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DB 4858 AGCGTCTTCTGCGATGTTGAATGCTGTCTCTGCGAGTGTATGAGCGGGTGTG 4917  
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| | | | |  
DB 4918 CTTGGTATGAGCTTACGCCCCCGAGACCAAGTATAGGATTAAGAGATTAAGAACCC 4977  
QY 1562 CGGGAATTCGCGTGTGCAAGACCAATCTTGAATTTGGAGGGCGCTTTACGGGCTCA 1621  
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DB 4978 CGGGAATTCGCGTGTGCAAGACCAATCTTGAATTTGGAGGGCGCTTTACGGGCTCA 5037  
QY 1622 CCACATAGACGCCCCCTTCTATCCAGACAAAGAGAGTGGGAAAACTTCCCTATC 1681  
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DB 5038 CTCAATATAGATCCCACTTTCTATCCAGACAAAGAGAGTGGGAAAACTTCTCTATC 5097  
QY 1682 TGGTAGCGGTACCAAGACCGGTGTGCGCTAGAGCTCAACCCCTCCCTGTGTGGAGC 1741  
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DB 5098 TGGTAGCGGTACCAAGACCGGTGTGCGCTAGAGCTCAACCCCTCCCTGTGTGGAGC 5157  
QY 1742 AGATGAGAAAGCTTATCGATCTCAAGCCCAACCTTCAGGAGCAACCTCTGTAT 1801  
| | | | |  
DB 5158 AGATGAGAAAGCTTATCGATCTCAAGCCCAACCTTCAGGAGCAACCTCTGTAT 5217  
QY 1802 ATAGACTGGGCGCTGTCCAGAAATGAAGTCAACCTTGAACGACCTCAGTCAACAGTATATCA 1861  
| | | | |  
DB 5218 ATAGACTGGGCGCTGTCCAGAAATGAAGTCAACCTTGAACGACCTCAGTCAACAGTATATCA 5277  
QY 1862 TGAACATATATGTGCGTGAACCTGAGAGTGTCAACGAGTACCTGGGTGTCTGTGGCGGCG 1921  
| | | | |  
DB 5278 TGAACATATATGTGCGTGAACCTGAGAGTGTCAACGAGTACCTGGGTGTCTGTGGCGGCG 5337

QY 1922 TTCTGGCTCTTTGGCCGCGTATTTGCTATATCCAGACAGCTGCGTGTCAATAGTAGTAGGA 1981  
| | | | |  
DB 5338 TTCTGGCTCTTTGGCCGCGTATTTGCTATATCCAGACAGCTGCGTGTCAATAGTAGTAGGA 5397  
QY 1982 TTGTCTTGTCCGGAAGCCGCAATCATACCCGACAGGAAAGTCTTACCGGGAGTTGC 2041  
| | | | |  
DB 5398 TTGTCTTGTCCGGAAGCCGCAATCATACCCGACAGGAAAGTCTTACCGGGAGTTGC 5457  
QY 2042 ATGAATGGAAGAGTCT 2059  
| | | | |  
DB 5458 ATGAATGGAAGAGTCT 5475

RESULT 15  
US-09-995-937-5  
Sequence 5, Application US/0995937  
Publication No. US20030028010A1  
GENERAL INFORMATION:  
APPLICANT: RICE, CHARLES et al.  
TITLE OF INVENTION: FUNCTIONAL DNA CLONE FOR HEPATITIS C VIRUS (HCV) AND USES THEREOF  
NUMBER OF SEQUENCES: 21  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: HOWELL & HAFERKAMP, L.C.  
STREET: 7733 FORSYTH BLVD., SUITE 1400  
CITY: ST. LOUIS  
STATE: MO  
COUNTRY: USA  
ZIP: 63105  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: Patentin Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/09/995,937  
FILING DATE: 28-No. US20030028010A1-2001  
CLASSIFICATION: <Unknown>  
PRIOR APPLICATION DATA:  
APPLICATION NUMBER: US/09/034,756  
FILING DATE: 04-May-1998  
ATTORNEY/AGENT INFORMATION:  
NAME: HOLLAND, DONALD R.  
REGISTRATION NUMBER: 35,197  
REFERENCE/DOCKET NUMBER: 6029-4831  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: 314-727-5188  
TELEFAX: 314-727-6092  
INFORMATION FOR SEQ ID NO: 5:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 12980 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: double  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
HYPOTHETICAL: NO  
ANTI-SENSE: NO  
SEQUENCE DESCRIPTION: SEQ ID NO: 5:  
US-09-995-937-5

Query Match 86.1%; Score 1774.8; DB 3; Length 12980;  
Best Local Similarity 91.4%; Pred. No. 0;  
Matches 1881; Conservative 0; Mismatches 177; Indels 0; Gaps 0;

QY 2 TGGGCGCTATCAAGGCTTATGCTCCAGCAGACAAAGGGGCTTTGGAGATGATATACCA 61  
| | | | |  
DB 3418 TGGGCGCGCATCAAGGCGCTTATGCTCCAGCAGAGAGGCGCTCTAGGGTATATACCA 3477  
QY 62 GCTTGAACGGGCGGGGACAAAACCAAGGAGGAGGAGTTCAGATCGGTCAACTGCTG 121  
| | | | |  
DB 3478 GCTTGAACGGGCGGGGACAAAACCAAGGAGGAGGAGTTCAGATCGGTCAACTGCTG 3537  
QY 122 CCAGACTTCTTGGCAACTGCACTTAACGGGGGTGTGTGAGCTGTCTAACATGAGCGCG 181





GO WORK (2010)

November 2005

Published\_Applications Nucleic Acid and Published\_Applications Amino Acid database searches now generate two sets of results each. The Published\_Applications databases have been split into two parts to reduce the amount of time required for their daily updates. This results in more machine time being available for processing searches.

Newly published applications will appear in the Published\_Applications\_New databases; older published applications make up the Published\_Applications\_Main databases.

Searches run against Nucleic Acid Published\_Applications produce two sets of results, with the extensions **.rnpbm** (Published\_Applications\_NA\_Main) and **.rnpbn** (Published\_Applications\_NA\_New).

Searches run against Amino Acid Published\_Applications produce two sets of results, with the extensions **.rapbm** (Published\_Applications\_AA\_Main) and **.rapbn** (Published\_Applications\_AA\_New).

THE END (aspio)

GenCore version 5.1.7  
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OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:11:03 ; Search time 400 Seconds  
(without alignments)  
4318.173 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061  
Sequence: 1 atgagcgctacacgagccta.....atgaatggaagagtcgtcga 2061

Scoring table: IDENTITY\_NUC  
Gapop 10.0, Gapext 1.0

Searched: 6068529 seqs, 41903697 residues

Total number of hits satisfying chosen parameters: 12137058

Minimum DB seq length: 0  
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%

Maximum Match 100%  
Listing first 45 summaries

Database : Published Applications NA New:\*

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3: /cgn2\_6/ptodata/2/pubpna/US07\_NEW\_PUB\_seq.\*  
4: /cgn2\_6/ptodata/2/pubpna/FCI\_NEW\_PUB\_seq.\*  
5: /cgn2\_6/ptodata/2/pubpna/US09\_NEW\_PUB\_seq.\*  
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7: /cgn2\_6/ptodata/2/pubpna/US11\_NEW\_PUB\_seq.\*  
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10: /cgn2\_6/ptodata/2/pubpna/US11\_NEW\_PUB\_seq.\*  
11: /cgn2\_6/ptodata/2/pubpna/US60\_NEW\_PUB\_seq.\*

pfed. No. is the number of results predicted by chance to have a  
score greater than or equal to the score of the result being printed,  
and is derived by analysis of the total score distribution.

## SUMMARIES

Result No.	Score	Query Match	Length	DB ID	Description
1	1765.2	85.6	9599	US-10-985-205-1	Sequence 1, Appli
2	1727.8	83.8	7983	US-10-509-921-7	Sequence 7, Appli
3	1727.8	83.8	7989	US-10-509-921-2	Sequence 2, Appli
4	1727.8	83.8	7992	US-10-509-921-3	Sequence 3, Appli
5	1381.2	67.0	7848	US-11-173-792-7	Sequence 7, Appli
6	1381.2	67.0	7979	US-10-509-921-9	Sequence 9, Appli
7	1381.2	67.0	7979	US-10-509-921-10	Sequence 10, Appli
8	1381.2	67.0	7980	US-10-509-921-4	Sequence 4, Appli
9	1381.2	67.0	7980	US-10-509-921-5	Sequence 5, Appli
10	1381.2	67.0	7987	US-11-173-792-5	Sequence 5, Appli
11	1381.2	67.0	7987	US-11-173-792-8	Sequence 8, Appli
12	1381.2	67.0	7987	US-11-173-792-13	Sequence 13, Appli
13	1381.2	67.0	7989	US-10-509-921-6	Sequence 6, Appli
14	1381.2	67.0	7989	US-10-509-921-13	Sequence 13, Appli
15	1381.2	67.0	7989	US-10-509-921-14	Sequence 14, Appli
16	1381.2	67.0	7989	US-11-119-330-1	Sequence 1, Appli
17	1381.2	67.0	7989	US-11-173-792-6	Sequence 6, Appli
18	1381.2	67.0	7989	US-11-173-792-10	Sequence 10, Appli
19	1381.2	67.0	7992	US-11-111-686-1	Sequence 1, Appli
20	1381.2	67.0	7992	US-11-111-686-4	Sequence 4, Appli
21	1381.2	67.0	7992	US-11-111-686-6	Sequence 6, Appli
22	1379.6	66.9	7989	US-11-173-792-9	Sequence 9, Appli

23	1379.6	66.9	7992	US-11-111-686-2	Sequence 2, Appli
24	1379.6	66.9	7992	US-11-111-686-5	Sequence 5, Appli
25	1379.6	66.9	7995	US-11-111-686-3	Sequence 3, Appli
26	1367.4	66.3	7979	US-10-509-921-11	Sequence 11, Appli
27	1367.4	66.3	7979	US-10-509-921-12	Sequence 12, Appli
28	1367.4	66.3	7989	US-10-509-921-8	Sequence 8, Appli
29	1355.6	65.8	2841	US-10-528-644A-51	Sequence 51, Appli
30	1351.6	65.6	2946	US-10-528-644A-54	Sequence 54, Appli
31	137	6.6	225	US-10-509-921-1	Sequence 1, Appli
32	128.4	6.2	162	US-11-137-220-3	Sequence 3, Appli
33	44.6	2.2	1281	US-10-454-437-255	Sequence 255, App
34	44.6	2.2	1281	US-11-055-822-363	Sequence 363, App
35	42.2	2.0	3240	US-11-052-554A-529	Sequence 529, App
36	36.8	1.8	2841	US-10-528-644A-51	Sequence 51, Appli
37	36.8	1.8	2946	US-10-528-644A-54	Sequence 54, Appli
38	36.6	1.8	2514	US-11-052-554A-543	Sequence 543, App
39	36.6	1.8	7983	US-10-509-921-7	Sequence 7, Appli
40	35.6	1.7	1119	US-10-858-720-48	Sequence 48, Appli
41	35.6	1.7	2251	US-11-094-519A-2	Sequence 2, Appli
42	35.6	1.7	2772	US-11-052-554A-531	Sequence 531, App
43	35.6	1.7	3239	US-11-094-519A-18	Sequence 18, Appli
44	35.4	1.7	5119	US-11-108-528-61	Sequence 61, Appli
45	35.4	1.7	7979	US-10-509-921-11	Sequence 11, Appli

## ALIGNMENTS

RESULT 1					
US-10-985-205-1					
; Sequence 1, Application US/10985205					
; Publication No. US20050266400A1					
GENERAL INFORMATION:					
; APPLICANT: Dumonceaux, Julie					
; APPLICANT: Cormier, Emmanuel G.					
; APPLICANT: Gardner, Jason P.					
; APPLICANT: Draglic, Tatjana					
; TITLE OF INVENTION: NOVEL SEQUENCES ENCODING HEPATITIS C VIRUS GLYCOPROTEINS					
; FILE REFERENCE: 71242-A/JPW/AJD					
; CURRENT APPLICATION NUMBER: US/10/985,205					
; CURRENT FILING DATE: 2004-11-09					
; PRIOR APPLICATION NUMBER: US 60/519,536					
; PRIOR FILING DATE: 2003-11-12					
; NUMBER OF SEQ ID NOS: 20					
; SOFTWARE: PatentIn version 3.1					
; SEQ ID NO 1					
; LENGTH: 9599					
; TYPE: DNA					
; ORGANISM: Hepatitis C virus					
US-10-985-205-1					
Query Match					
Best Local Similarity 91.1%; Pred. No. 0;					
Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;					
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DB	3418	TGGCGCCATGACGCGCTATGCCAGACGAGGCGCTTTGGATGATTAATCACCA	3477		
QY	62	GCTTGACCGCGCGGACAAACAGGTGAGGCTTCAATCTGTCACTGTGCG	121		
DB	3478	GCTTGACCGCGCGGACAAACAGGTGAGGCTTCAATCTGTCACTGTGCG	3537		
QY	122	CCGACACTTTTGGCAACTGTCAATTAACGGGCTGTGATCTGTCAATGAGCG	181		
DB	3538	CCGACACTTTTGGCAACTGTCAATTAACGGGCTGTGATCTGTCAATGAGCG	3597		
QY	182	GACGACGACATGCGGCTGACCTAAGGCTCTGTATCAATGACCAATGAGCG	241		
DB	3598	GACGACGACATGCGGCTGACCTAAGGCTCTGTATCAATGACCAATGAGCG	3657		
QY	242	AAGACCTGTAGGCTGCGCGCTCCCAAGGTGCGGCTCAATTAACATGCACTTGC	301		

Db	3658	AAGACCTTGTGGGCTGGGCCGCTCTCTCAAGGTTCCCGCTCAATTGACACCTGTACTTCGCG	3717
QY	302	GCTCTCTCGGACCTTTACCTGTGTCAAGAGGACGCGCGATGTCAATTCTGTGGCGGACGGG	361
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QY	352	GTGATGCGAGGGGACGCTGCTTTTGCCCGGCTTACTCTTACTTTGAAAGCTCTCGG	421
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QY	422	GAGGCGCTCTGTGTGACCCCGGACGAGCAATGCGGTAGGGCATTTTGAGACCGCGGATATGA	481
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QY	482	CCCGTGAAGTGGCTTAAGGCGGTGTGACTTCATCCCGTAGAGGCTTTAGAGCAACCATGA	541
Db	3898	CCCGTGAAGTGGCTTAAGGCGGTGTGACTTCATCCCGTAGAGGCTTTAGAGCAACCATGA	3957
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QY	602	CCCACTTGATGCTCTCCACCGGACGGGTAAAGAGACCAAGGTCCCGGCGCATATGACAG	661
Db	4018	CCCACTTGATGCTCTCCACCGGACGGGTAAAGAGACCAAGGTCCCGGCTGTACGACG	4077
QY	662	CTCAGGGGCTACAAAGGTGTGTGTGTCAACCCCTCCGTTGTGTCAACAATGGGCTTTGTG	721
Db	4078	CCCAAGGGCTACAAAGGTGTGTGTGTCAACCCCTCTGTTGTGTCAACGCTGGGGCTTTGTG	4137
QY	722	CTTACATGTCCAAAGGCCCATGGGATGTATCTTACATACAGACGTGGGTGAGACATTA	781
Db	4138	CTTACATGTCCAAAGGCCCATGGGATGTATCTTACATACAGACCGGGGTGAGAACATTA	4197
QY	782	CTACTGGGAGCCCGCATCAACGTATTCACCTACGGGAATTCCTCCGACCGCGGGTGT	841
Db	4198	CCACTGGGAGCCCGCATCAACGTATTCACCTACGGGAATTCCTCCGACCGCGGGTGT	4257
QY	842	CAGGGGGTGTCTTATGACATTAATATTTGTGACGAGTGCACCTCCAGGATCCAACTTCA	901
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Db	4318	TCTTGGGCAATTGGGCACTGTCTTTCACCAAGCAGAGACTGCGGGGCGAGACTGCTGTG	4377
QY	962	TGCGCACCGGTACCCCTCCGGGCTCCGTCACTGTGCCCCCATCTTAACTGAGAGGTTG	1021
Db	4378	TGCGCACCTGTACCCCTCCGGGCTCCGTCACTGTGTCCATCTTAACTGAGAGGTTG	4437
QY	1022	CTCTGTCCACTACCGGAGAGATCCCTTTTATGAGGAGCTAATCCCTTGAAGCATTA	1081
Db	4438	CTCTGTCCACTACCGGAGAGATCCCTTTTATGAGGAGCTAATCCCTTGAAGGATTA	4497
QY	1082	AGGGGGGAGACATCTCATCTTCTGSCACTCAAGAAAGAGTGCAGAGCTCGCCGAA	1141
Db	4498	AGGGGGGAGACATCTCATCTTCTGSCACTCAAGAAAGAGTGCAGAGCTCGCCGGA	4557
QY	1142	AACGTGTGCGCTTTGGGCGTCAATGCGGTGTACTTACCGGGCTTATGATGTCTGTCA	1201
Db	4558	AGCTGTGTGCGCTTTGGGCGTCAATGCGGTGTACTTACCGGGCTTATGATGTCTGTCA	4617
QY	1202	TCCGACCAAGTGGTACGTTGTGCTGTGGCACTGACGCGCTCAATGACGCGCTTATACG	1261
Db	4618	TCCGACCAAGGCGGCAATGTTGTGTGTGTGTGACCGAGTGTCTTATGACTGGCTTTACG	4677
QY	1262	GCGACTTGATTCGCGTGTATGACTGCAACACGTGTGTCAACCCAGACAGTGCATTTACGC	1321
Db	4678	GCGACTTGATTCGCGTGTATGACTGCAACACGTGTGTCAACCCAGAGTGTCTTATGACTG	4737
QY	1322	TTGACCCCTACCTTACCAATTGAGCAATACGCTTCCCGAGATGTGTCTTCGCGTACTC	1381
Db	4738	TTGACCCCTACCTTACCAATTGAGCAACACGCTCCCGAGATGTGTCTTCTCAGAGATTC	4797

QY	1382	AACTCGGGGATAGACTGCGACAGGGAAGCCAGGCATCTACAGATTTGTGGCACCCGGGGG	1441
Db	4798	AACCCCGGGGAGAGACTGGCAGGGGGAAGCCAGGCATCTAATAGATTTGTGGCACCCGGGGG	4857
QY	1442	AGCGTCCTTCTGGGATGTTTGAATCTGCTGTCTCTGCGAAGTGTATGACCGGAGTTGTG	1501
Db	4858	AGCGCCCTCCGGCATGTTTGCATCTGTCGTCCTCTGAGATGCTATGACCGGAGCTGTG	4917
QY	1502	CTTGGTATGACTTAACGCCCGCCGAGACACAGTTAGGCTACGACATACATGAACACC	1561
Db	4918	CTTGGTATGAGACTCAACGCCCGCCGAGACTACAGTTAGGCTACGACGCTACATGAACACC	4977
QY	1562	CGGAGCTCCCGTGGCCAGAACCATCTGAAATTTTGGGAGGAGGTCTTTACGGGCTCA	1621
Db	4978	CGGGCTTCCCGTGTGCCAGAACCATCTTGAATTTTGGGAGGAGGTCTTTACGGGCTCA	5037
QY	1622	CCCAATAGACGCCCACTTCTATCCAGACAAAGCAGAGTGGGGAAAACCTTCTTATC	1681
Db	5038	CTCATATAGATGCCCATTTTATTCACGACAAAGACAGAGTGGGGAGAACTTCTTATAC	5097
QY	1682	TGTAAGCCTACCAAGCCACCGTGGCGCTAGAGCTCAAGGCCCTCCCGCGTGGGACC	1741
Db	5098	TGTAAGCCTACCAAGCCACCGTGGCGCTAGAGGCTCAAGGCCCTCCCGCATGTGGGACC	5157
QY	1742	AGATGTGAAATGCTTGAATCCGCTCAAGCCCACTTCATGGGCAACACTCTGTAT	1801
Db	5158	AGATGTGAAATGTTGATTCGCGCTTAAACCACTTCATGGGCAACACTCTGTAT	5217
QY	1802	ATAGACTGGGGCGCTGCCAAGATAGACACCTCGACGCAACCCAGTCAACCAAGTATATCA	1861
Db	5218	ACAGACTGGGGCGCTGTTAGATATAGTACACCTCGACGCAACCCAAATATATCA	5277
QY	1862	TGACATGATGTCCGCTGACCTGGAAGTCTCAAGAGTACCTGGGTGCTGTTGGCGCG	1921
Db	5278	TGACATGATGTCCGCGGACCTGGAAGTCTCAAGAGTACCTGGGTGCTGTTGGCGCG	5337
QY	1922	TTTGGCTGCTTTGGCCGCGGTATGGCTATCAACAGCTGGTGTGCTATATAGTAGAGA	1981
Db	5338	TCTGGCTGCTCTGGCCGCGGTATGGCTATCAACAGCTGGTGTGCTATATAGTAGAGA	5397
QY	1982	TTGTCTTCTCGGAAAGCCGCAATTCATACCCGACAGGAGTGCCTCTACCGGAGTTGCG	2041
Db	5398	TGCTCTTCTCGGGAAGCCGCAATTCATCTGACAGGAGGTTCTCTACAGGAGTTGCG	5455
QY	2042	ATGAATGGAAGAGTCT 2059	
Db	5458	ATGAGATGGAAGAGTCT 5475	

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RESUT 2
US-10-509-921-7
; Sequence 7, Application US/10509921
; Publication No. US2005025003A1
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons
; FILE REFERENCE: PS135
; CURRENT APPLICATION NUMBER: US/10/509,921
; CURRENT FILING DATE: 2004-10-01
; PRIOR APPLICATION NUMBER: 60/369,685
; PRIOR FILING DATE: 2002-04-03
; NUMBER OF SEQ. ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 7983
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Thepoly nucleotide sequence encodes sequences from
US-10-509-921-7
; OTHER INFORMATION: HCV 1a Replicons

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Query Match 83.8%; Score 1727.8; DB 7; Length 7933;  
 Best Local Similarity 89.9%; Pred. No. 0;  
 Matches 1852; Conservative 0; Mismatches 207; Indels 0; Gaps 0;

Qy	1	ATGGGCGCTATACGCGCTATGCCCCAGAGACMAAGGCGCTTTTGGATGCAATATACACC	60
Db	1801	ATGGGCGCTATATACGCGCTATGCCCCAGAGACGCGAGCTTACCTTGGCTGATCATCT	1860
Qy	61	AGCTTGACCGGCGCGGAGCAAAAACAGGTGAGGGGTGAGTTCAAGTGTGTCACTGCT	120
Db	1861	AGCTTGACAGGCGCGGAGCAAGAACAGGTGAGGGGTGAGTTCAAGTGTGTCTCCACCGCA	1920
Qy	121	GCCGACCTTTCTTGGCAACCTGATTAACGGGGGTGTGTGGACTGTCTACCATGAGACC	180
Db	1921	ACACAACTTTCTTGGCAACCTGATTAACGGGGGTGTGTGGACTGTCTATCATGTGTGCC	1980
Qy	181	GAACAAAGAACCTATTGCGTCACTTAAGGGTCTGTATTACAGATGTACACCAATGTGAC	240
Db	1981	GGCTCAAAAGACCTTTGCGGCGCCAAAGGCGCAATCACCAATGTACCAATGTGAC	2040
Qy	241	CAAGACTCTGATAGCTGGCGCGCTCCCAAGGTGCGCGCTATTAAACCATGACTTGC	300
Db	2041	CAAGACTCTTGTGTGGCTGGCGCGCTCTCAAGGTTCGCGCTATTGACACCTGTACTTGC	2100
Qy	301	GGCTCTGCGGACCTTTACTGCTGCAAGGACGCGCGATGTCACTTCTGTGGCGGAGCG	360
Db	2101	GGCTCTGCGGACCTTTACTGCTGCAAGGACGCGCGATGTCACTTCTGTGGCGGAGCG	2160
Qy	361	GGTGTGCGAGGGGAGCGCTGTTCGCGCGCGCTATCTCTTATTTGAAAAGCTCTCG	420
Db	2161	GGTGTATACAGGGGAGCGCTGTTCGCGCGCGCTATCTCTTATTTGAAAAGCTCTCG	2220
Qy	421	GGAAGGCTCTGCTGTGCTGCGCGAGAGACATGCGGTGAGCATTTAGAGCGCGGTATGC	480
Db	2221	GGGGGTCTGCTGTGTGCTGCGCGAGAGACATGCGGTGAGCATTTAGAGCGCGGTATGC	2280
Qy	481	ACCGGTGAGGTGCTTAAGGCGGTGACTTCAATCCCGTGAAGAGCTTGAAGCAACATG	540
Db	2281	ACCGGTGAGGTGCTTAAGGCGGTGACTTCAATCCCGTGAAGAGCTTGAAGCAACATG	2340
Qy	541	AGGTCCCGCGGTGTTCTCAGACAACTCTCCCAACAGAGTGCACCAAGCTACCAATG	600
Db	2341	AGATCCCGCGGTGTTCAAGAGCACTCTCTCAACAGAGTGCACCAAGCTTCAAGT	2400
Qy	601	GCCCACTGCTATGCTCCCAAGCGGTAAAGACCAAGGTCCCGCGCATAGCA	660
Db	2401	GCCCACTGCTATGCTCCCAAGCGGTAAAGACCAAGGTCCCGCGCATAGCA	2460
Qy	661	GCTAGGGCTCAAGAGTGTGCTCAACCCCTCGTGTGCAACAATGGGCTTTGGT	720
Db	2461	GCCAGGGCTCAAGAGTGTGCTCAACCCCTCGTGTGCAACAAGCTTTGGT	2520
Qy	721	GCTTACATGTCCAAGGCGCATGAGATTGATCTTAACATCAGGACTGGGTGAGCAATT	780
Db	2521	GCTTACATGTCCAAGGCGCATGAGATTGATCTTAACATCAGGACTGGGTGAGCAATT	2580
Qy	781	ACTACTGCAAGCGCGATCACTGATTCACCTTACGCGCAAGTTCCTTGGCGAGCGGTGT	840
Db	2581	ACCACTGCAAGCGCGCATCACTGATTCACCTTACGCGCAAGTTCCTTGGCGAGCGGTGT	2640
Qy	841	TCAGGGGTGCTTATGACATAATTAATTGTGACAGGTGCCACTCCAGGATGCCAATCC	900
Db	2641	TCAGAGGTGCTTATGACATAATTAATTGTGACAGGTGCCACTCCAGGATGCCAATCC	2700
Qy	901	ATCTTGAGCAATGCACTGTCTTTGACCAAGAGAGACGCGGGGCGAGACTGTGTG	960
Db	2701	ATCTTGAGCAATGCGGCACTGTCTTTGACCAAGAGAGACGCGGGGCGAGACTGTGTGTG	2760
Qy	961	CTCGCACCGCTACCCCTCCGGGCTCGCTCACTGTGCCCATCTTAACAATGAGAGGTT	1020
Db	2761	CTCGCACCTGTACCCCTCCGGGCTCGCTCACTGTGCCCATCTTAACAATGAGAGGTT	2820
Qy	1021	GCTGTGTCACTAACGAGAGATCCCTTTTATGCAAGGCTATTCCTCCTTGAAGCAATT	1080

Db	2821	GCTGTGTCAACACCGAGAGATCCCTTTTACGCGCAAGGTATCCCTCGAGGTGATTC	2880
Qy	1081	AAGGGGGAGACATCTCATCTTTCTGCCATCTCAAGAAAGTGTGACGAGCTGCCGCA	1140
Db	2881	AAGGGGGAGACATCTCATCTTTCTGCCATCTCAAGAAAGTGTGACGAGCTGCCGCG	2940
Qy	1141	AACTGTGTGCGGTGGGCGTCAATGCGGTGCTTATCAACGCGGCTTGATGTGCGTTC	1200
Db	2941	AAGCTGTGTGCGGTGGGCGTCAATGCGGTGCTTATCAACGCGGCTTGATGTGCGTTC	3000
Qy	1201	ATCCGACCAAGTGTGACGTTGTGCTGTGCAACCTGACCGCTCATATGACCGGCTTAC	1260
Db	3001	ATCCGACCAAGGCGGAGATGTTGTGTGTGTGACCGATGCTCATATGACCGGCTTAC	3060
Qy	1261	GCGCACTTGATTTGGGTGATAGCTGCAACAGTGTGTACCCAGACAGTGTGACTTACG	1320
Db	3061	GCGCACTTGATTTGGGTGATAGCTGCAACAGTGTGTCACTAGACAGTGTGATTTACAG	3120
Qy	1321	CTTGAACCTTACTTCAACATTTGAGACAAATCAAGCTTCCAGAGTGTCTCCGCTACT	1380
Db	3121	CTTGAACCTTACTTCAACATTTGAGACAAACAGCTTCCAGAGTGTCTCTCAAGACT	3180
Qy	1381	CAACGTGCGGGTAAAGTCTGAGAGAGGAGGAGCACTTACAGATTTGTGSCACCGGGG	1440
Db	3181	CAACGCGGGGCAAGACTGAGAGGAGGAGGAGGAGCACTTATAGATTTGTGSCACCGGGG	3240
Qy	1441	GAGCGTCTTCTGCAATGTTTGAATCTGTCTGTCTCTGCAAGTGTATGACGCGGTTGT	1500
Db	3241	GAGCGCTCTTCTGCAATGTTTGAATCTGTCTGTCTCTGCAAGTGTATGACGCGGCTGT	3300
Qy	1501	GCTTGTATGAGCTTACGCGCGCGGAGACACAGTGTGCTTACAGACATATGAAACAC	1560
Db	3301	GCTTGTATGAGCTTACGCGCGCGGAGACACAGTGTGCTTACAGACATATGAAACAC	3360
Qy	1561	CCGGGACTTCCCGTGTGCAAGACCATCTTGAATTTTGGAGGCGTCTTTACGGGTCTC	1620
Db	3361	CCGGGCTTCCCGTGTGCAAGACCATCTTGAATTTTGGAGGCGTCTTTACGGGCTTC	3420
Qy	1621	ACCCATATGACGCGCATCTTCTTATCCAGACAAAGACAGTGTGGGAAAACCTTCTTAT	1680
Db	3421	ACTCATATGATGACGCGCATCTTCTTATCCAGACAAAGACAGTGTGGGAAAACCTTCTTAT	3480
Qy	1681	CTGTATGAGTACCAAGCCAGTGTGCGCTTGAAGCTCAAGCCCTCCCGCGTGGGAGC	1740
Db	3481	CTGTATGAGTACCAAGCCAGTGTGCGCTTGAAGCTCAAGCCCTCCCGCATCGTGGAGC	3540
Qy	1741	CAGATGTGAAGTCTTGATCCGTCTCAAGCCCAACCTCCATGGGCGCAACCTCTGCTA	1800
Db	3541	CAGATGTGAAGTCTTGATCCGTCTCAAGCCCAACCTCCATGGGCGCAACCTCTGCTA	3600
Qy	1801	TATAGACTGGGCGCTGTCCAGAAATGAAGTCAACCTTGAAGCAGCAGTACCAAGTATATC	1860
Db	3601	TACAGACTGGGCGCTGTTCAGAAATGAAGTCAACCTTGAAGCAGCAGTACCAAAATATATC	3660
Qy	1861	ATGACATGATGTGGGCTGACCTTGAAGGTGCTTCAAGATACCTTGGGTCTGTGGCGGC	1920
Db	3661	ATGACATGATGTGGGCTGACCTTGAAGGTGCTTCAAGACACTTGGGTCTGTGGCGGC	3720
Qy	1921	GTTCTGGGTCTTTTGGCGCGCTATTTGCTTACCAAGGCTGCTGTATGATGATGATG	1980
Db	3721	GTTCTGGGTCTTTTGGCGCGCTATTTGCTTACCAAGGCTGCTGTGTATGATGATGATG	3780
Qy	1981	ATTGTCTTTGTCGGAAGACCGGCAATCATACCGACAGGAGTCTTCTACCGGAGTTTC	2040
Db	3781	ATTCGTCTTTGTCGGAAGACCGGCAATTAATCTGACAGGAGGATTTCTTACAGGAGTTTC	3840
Qy	2041	GATGAATGGAAGTGTCT 2059	
Db	3841	GATGAGATGAAGAGTGTCT 3859	

RESULT 3



US-10-509-921-2  
; Sequence 2. Application US/10509921  
; Publication No. US2005025093A1  
; GENERAL INFORMATION:  
; APPLICANT: SmithKline Beecham Corporation  
; TITLE OF INVENTION: Hepatitis C Virus Sub-genomic Replicons  
; FILE REFERENCE: P51335  
; CURRENT APPLICATION NUMBER: US/10/509,921  
; PRIORITY FILING DATE: 2004-10-01  
; PRIOR APPLICATION NUMBER: 60/369,685  
; PRIOR FILING DATE: 2002-04-03  
; NUMBER OF SEQ ID NOS: 54  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 2  
; LENGTH: 7989  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: The polynucleotide sequence encodes sequences from  
; OTHER INFORMATION: HCV H77 (BB7-F1) Replicons  
US-10-509-921-2

Query Match 83.8%; Score 1727.8; DB 7; Length 7989;  
Best Local Similarity 89.9%; Pred. No. 0;  
Matches 1852; Conservative 0; Mismatches 207; Indels 0; Gaps 0;

QY 1 ATGGGCGCTATACGGCCCTATGCCCCAGACAGAGGGGCTTTGGAGTGCATATACCC 60  
DB 1801 ATGGGCGCTATATACGGCCCTATGCCCCAGACAGAGGGGCTTGGCTGCATATACCT 1860  
QY 61 AGCTTGACCGGCGGGGACAAACAGAGTGAAGGTTCAGATCGTGTCAACTGCT 120  
DB 1861 AGCTTGACCGGCGGGGACAGAAACAGTGCAGAGGGGAGTCCAGTGTCTCCACCGCA 1920  
QY 121 GCCCAGACTTTCTTGCAACCTGCAATTAAGGGGTGTGTGAGCTGTCTCAATGAGGC 180  
DB 1921 ACACATCTTTCTGGCGACCTGCGTCATAGGCGTGTGTGAGCTGTCTATCATGTGCGC 1980  
QY 181 GGAACAGAGCATTTGCGTCACCTAAGGCTCTGTATTCAGATGTAACCAATGTGAC 240  
DB 1981 GGCCTAAGAGCCCTTGCCGCGCCCAAGGGCCCAATTCACCAATGTACCAATGTGAC 2040  
QY 241 CAAGACCTTGATAGCTGCGCGCTCCCAAGGTGCGCGCTCAATTAACCATGACCTTGC 300  
DB 2041 CAAGACCTTTGTGGCTGCGCGCTCCCAAGGTTCCTCGTCAATGACACCTGTACCTGC 2100  
QY 301 GGCCTCTGGGACCTTTACTGTGTCAAGAGCAAGCGATGTCATTCGTGTGCGCGGACG 360  
DB 2101 GGCCTCTGGGACCTTTACTGTGTCAAGAGCAAGCGATGTCATTCGTGTGCGCGGACG 2160  
QY 361 GGTGATGAGAGGGGAGCGCTTTCGCGCGCGCTATCTTACTTGAAGAGCTCCCTCG 420  
DB 2161 GGTGATGAGAGGGGAGCGCTTTCGCGCGCGCTATCTTACTTGAAGAGCTCCCTCG 2220  
QY 421 GAGAGCCCTCTGTGTGCGCGCAGAGCAATGCGTATGAGCATATGAGAGCGCGTATGC 480  
DB 2221 GGGGGTCCGCTTTGTGTGCGCGCGGAGCAAGCGTGTGAGCTATTAAGAGCGCGGTGTC 2280  
QY 481 ACCCGTGAAGTGGCTTAAGCGGTGAGCTTCAATCCCGGTAGAGAGCTTGAAGCAACATG 540  
DB 2281 ACCCGTGAAGTGGCTTAAGCGGTGAGCTTCAATCCCGGTAGAGAGCTTGAAGCAACATG 2340  
QY 541 AGGTCCCGGTGTTCTCAAGCAATCTCTCCCAAGAGAGTGCCTCCAGAGCTTAAGAGT 600  
DB 2341 AGATCCCGGTGTTCTCAAGCAATCTCTCCCAAGAGAGTGCCTCCAGAGCTTAAGAGT 2400  
QY 601 GCCCAGCTGATGCTCCCAAGCGAGCGGTAAAGAGCAAGAGTCCCGGCGCATACGA 660  
DB 2401 GCCCAGCTGATGCTCCCAAGCGAGCGGTAAAGAGCAAGAGTCCCGGCGCTGACGA 2460  
QY 661 GCTGAGGGGTACAGAGTGTGTGTCAACCCCTCGGTGTGCAACATGGGCTTTGGT 720  
DB 2461 GCCCAGGGGTACAGAGTGTGTGTCAACCCCTCGGTGTGCAACAGTGGGCTTTGGT 2520

QY 721 GCTTACATGTCAGAGGCCCATGGATTTGATCTTAACATCAGAGACTGGGGTGAAGCAATT 780  
DB 2521 GCTTACATGTCAGAGGCCCATGGGGTGTATCTTAATATCAGAGCCGGGGTGAAGCAATT 2580  
QY 781 ACTACTGGACCGGATCAGCTATTCACCTAAGGCAAGTTCTTTCGCGAGCGGGGTGT 840  
DB 2581 ACGACTGGACCGGATCAGCTATTCACCTAAGGCAAGTTCTTTCGCGAGCGGGGTGT 2640  
QY 841 TCAGGGGTGCTTATGACATATATTTGTGACAGTGTCCACTCCAGAGTGCACATCC 900  
DB 2641 TCAGAGGTGCTTATGACATATATTTGTGACAGTGTCCACTCCAGAGTGCACATCC 2700  
QY 901 ATCTTGGGCAATTTGGACCTGCTCTTGACCAAGAGAGACCGGGGGCGAGACTGCTG 960  
DB 2701 ATCTTGGGCAATTTGGACCTGCTCTTGACCAAGAGAGATCGGGGGCGAGACTGCTG 2760  
QY 961 CTGCGCACCGGTACCCCTCCGGGCTCGTCACTGTGCCCCATCTTAACATCAGAGGTT 1020  
DB 2761 CTGCGCACCTGCTACCCCTCCGGGCTCGTCACTGTGCCCCATCTTAACATCAGAGGTT 2820  
QY 1021 GCTGTGTCACTTACCGGAGAGATCCCTTTATATGCAAGGCTATTCCTTGAACATTT 1080  
DB 2821 GCTGTGTCACTTACCGGAGAGATCCCTTTATATGCAAGGCTATTCCTTGAAGTATC 2880  
QY 1081 AAGGGGGGAGACATCTCATCTTCTGCGCACTCAAGAGAGAGTGCAGAGCTCCCGCA 1140  
DB 2881 AAGGGGGGAGACATCTCATCTTCTGCGCACTCAAGAGAGAGTGCAGAGCTCCCGCG 2940  
QY 1141 AAACGTGTGCGGTGGGCGTCAATGCGGTGCTTAATCAAGCGGCTTATGATGTCTGTC 1200  
DB 2941 AAGCTGTGTGCGGTGGGCGTCAATGCGGTGCTTAATCAAGCGGCTTATGATGTCTGTC 3000  
QY 1201 ATCCGACCATGTGTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1260  
DB 3001 ATCCGACCATGTGTGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3060  
QY 1261 GCGGACTTCGATTCGGGTATGAGCTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1320  
DB 3061 GCGGACTTCGATTCGGGTATGAGCTGCAACAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3120  
QY 1321 CTGACCCCTTACCTTACCATTTAAGACATACGCTTCCCGAGAGTGTGTCTCCGTA 1380  
DB 3121 CTGACCCCTTACCTTACCATTTAAGACATACGCTTCCCGAGAGTGTGTCTCCAGACT 3180  
QY 1381 CAAGCTCGGGGTATGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1440  
DB 3181 CAAGCTCGGGGTATGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3240  
QY 1441 GAGCGTCTCTTGTGGCATTTGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1500  
DB 3241 GAGCGTCTCTTGTGGCATTTGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 3300  
QY 1501 GCTTGTATGAGCTTACCGCGCGAGCAACAAGTTAGGCTTACGAGCATATGAAACAC 1560  
DB 3301 GCTTGTATGAGCTTACCGCGCGAGCAACAAGTTAGGCTTACGAGCATATGAAACAC 3360  
QY 1561 CCGGACCTTCCCGTGTGCAAGACCAATTTGAATTTTGGAGGGGTCTTTAACGGGTCTC 1620  
DB 3361 CCGGAGCTTCCCGTGTGCAAGACCAATTTGAATTTTGGAGGGGTCTTTAACGGGTCTC 3420  
QY 1621 ACCCATAGAGCGCCCATCTTATCCAGACAAGAGAGAGTGGGAAAACTTCCCTAT 1680  
DB 3421 ACTCATATAGTATGCCCATTTTATCCAGACAAGAGAGAGTGGGAAAACTTCCCTAT 3480  
QY 1681 CTGTAGGTATCAAGCAAGCGGTGTGCTGAGAGCTCAAGCCCTTCCCGGTGTGGAG 1740  
DB 3481 CTGTAGGTATCAAGCAAGCGGTGTGCTGAGAGCTCAAGCCCTTCCCGGTGTGGAG 3540  
QY 1741 CAGATGTGAAGTGTGTATCTGTCAAGCCCATCTTCATGGGCAACACTCTGTCTA 1800  
DB 3541 CAGATGTGAAGTGTGTATCTGTCAAGCCCATCTTCATGGGCAACACTCTGTCTA 3600

Oy	1801	TATTGACCTGGGCGGCTGTCCAGAAATGAAGTCAACCTTGAGCGCACCCAGTACACCAAAATATATATC	1860
Db	3601	TACAGACTCGGGCGGCTGTTCCAGAAATGAATCAACCTTGAGCGCACCCAAATTCACAAATATACATC	3660
Oy	1861	ATGACATATATGTCCGCTGTGACTGACCTGGAGGTGCTGCACAGTACCTGGGTGCTCGTTGGCGGC	1920
Db	3661	ATGACATATCATGTGTGGCGCGACCTGGAGGTGCTGCACAGTACCTGGGTGCTCGTTGGCGGC	3720
Oy	1921	GTTCTGGGCTGCTTTGGCGCGTATTTGCTATTCACAAGGCTCCGTGTCTATATGTAGGTAGG	1980
Db	3721	GTTCTGGGCTGCTGTGGCGCGGTATTTGCTGTTCACAAGGCTCCGTGTCTATATGTAGGTAGG	3780
Oy	1981	ATTGTCTGTCCGGAAGACCCGGCAATCATTACCACCGACAGGGAAGTCTTACCCGGGAGTTTC	2040
Db	3781	ATGTGCTTGTCCGGGAAGACCCGGCAATTTACTCTACAGGAGAGTTCTCTACAGGAAGTTTC	3840
Oy	2041	GATGAATATGAAGAAGTCTT	2059
Db	3841	GATGAGATGAAGAAGTCTT	3859

RESULT 4  
US-10-509-921-3

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? Sequence 3 Application US/10509921
? Publication No. US20050250093A1
? GENERAL INFORMATION:
? APPLICANT: SmithKline Beecham Corporation
? TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons
? FILE REFERENCE: P51335
? CURRENT APPLICATION NUMBER: US/10/509,921
? CURRENT FILING DATE: 2004-10-01
? PRIOR APPLICATION NUMBER: 60/369,685
? PRIOR FILING DATE: 2002-04-03
? NUMBER OF SEQ ID NOS: 54
? SOFTWARE: FastSeq for Windows Version 4.0
? SEQ ID NO 3
? LENGTH: 7992
? TYPE: DNA
? ORGANISM: Artificial Sequence
? FEATURE:
? OTHER INFORMATION: Thepolynucleotide sequence encodes sequences from
? US-10-509-921-3 HCV H77 (BB7-F1/P2) Replicons
? US-10-509-921-3

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Query Match	83.8%;	Score 1727.8;	DB 7;	Length 7992;
Best Local Similarity	89.9%;	Pred. No. 0;		
Matches 1852; Conservative	0;	Mismatches 207;	Indels 0;	Gaps 0;

Oy	1	TTGGGGCTTATCAGGGCTTAAGCCAGAGACAAAGGGGCTTTTGGATGTGATATCAAC	60
Db	1801	ATGGGGCTTATTAACGGCTCTACCTCCAAACAGAGCGCAAGGCTCTATTGGCTGCATCTATCACT	1860
Oy	61	AGCTTGACCGGGCCGGGACAAAAACAGGTGAGAGGTGAGTTCAAGATGCTGCAACTGCT	120
Db	1861	AGCTTCAACAGGCCGGGACAGAGAACAGGTTCAGAGGGGAGGTTCAAAGTGTCTTCAACCGCA	1922
Oy	121	GCCCAAGCTTTCTTGGCAACTGCATTTAACGGGAGTGTGTGGACATGTCTAACATGSAACC	180
Db	1921	ACACAATCTTTCTGTGGCAACCTGGCTCAATGGCGTGTGTGGACATGTCTATCATCTGTGTGC	1980
Oy	181	GGACCAAGGACCATTTGCGTCACTTAAGGTCCTGTTATTCAGATGTACCAATGTGAC	240
Db	1981	GGCTCAAAAGACCTTTGCCGGGCCCAAAAGGGCCCAATCAACCAATGTACCAACCAATGTGAC	2040
Oy	241	CAAGACCTGTAGGTGTGGCCGCGCTCCCAAGGTGCGCGCTCATTTAAACCAATGCACCTTGC	300
Db	2041	CAAGACCTTGTGGGCTGTGGCCGCGCTCTCAAGGTTCCCGCTCATTTAGCAACCCGTACCTGC	2100
Oy	301	GGCTCCTCGGACCTTTTAACTGTGTACAGAGGACAGCGCATGTCACTCTGTGGCGCGAGCG	360
Db	2101	GGCTCCTCGGACCTTTTAACTGTGTACAGAGGACAGCGCATGTCACTCTCCGTGGCGCGGCGA	2160
Oy	361	GGGTATGACAGGGGAGACGCTGTCTTTCGCCCGGCTATCTCTTAAGTAAGGCTCTTCG	420

Db	2161	GGTATATGACAGGGGTAGCTTCCTTCGCCCCGGGCCATTTCCTACTTGAAAGCTTCGCG	2220
QY	421	GGAGGCCCTCTGCTGTGCCCCGACAGACATGCGGTAGGACATATTCAGAGCGCGGTATGC	480
Db	2221	GGGGGTCCGCTGTGTGTGCCCCGGGGACACGCGGTGGGCTTATTCAGGGCGCGGTGTGC	2280
QY	481	ACCGGTGAGTGTGCTAAGCGGTGACTTCATTCGCCGTAGAGCTTAGAGACAACTAG	540
Db	2281	ACCGGTGAGTGTGCTAAGCGGTGACTTCATTCCTGTGAGAACCTTAGGACAACTAG	2340
QY	541	AGGTCCCGGGTGTCTAGACAACTCCGCCACAGAGAGGCCAGAGCTACCAAGTG	600
Db	2341	AGATCCCGGGTGTACGAGACATCTCTTCACACAGAGTCCCCAGAGCTTCAGGTG	2400
QY	601	GCCCACTGACGTGCTCCACCGGACGGGTAAAGACACAAAGTCCCGCGCTAACGCA	660
Db	2401	GCCCACTGACGTGCTCCACCGGACGGGTAAAGACACAAAGTCCCGCGGTAGCA	2460
QY	661	GCTACGGGCTACAAAGTGTGTGTCTACCCCTTCGTGTCTGACAACTAGGCTTTGT	720
Db	2461	GCCCAAGGGCTACAAAGTGTGTGTCTACCCCTCTGTGTCTGACAAAGCTGGCTTTGT	2520
QY	721	GCTTACATGTCCAAAGGCCCATGGGATTTGATTCCTTAACATAGGACTGGGGTGAACAAT	780
Db	2521	GCTTACATGTCCAAAGGCCCATGGGATTTGATTCCTTAACATAGGAGCGGGGTGAACAAT	2580
QY	781	ACTATGCGCACCCGATCATCCTATTTCCACCTACGGCAAGTTCTTGTGCGACGGCGGTGT	840
Db	2581	ACCATGCGACGCCCATCATCCTACTCCACCTACGGCAAGTTCTTGTGCGACGGCGGTGC	2640
QY	841	TCAGGGGGTCTTATGACATATAATTTGTGACAGATGCCATCTCACGGATGCACATCC	900
Db	2641	TCAGAGGGTCTTATGACATATAATTTGTGACAGATGCCATCTCACGGATGCACATCC	2700
QY	901	ATCTTTGGGCAATTGGCATCTGTCTTGGACCAAGCAAGACCGGGGGGCGAGCTGACTGTG	960
Db	2701	ATCTTTGGGCAATCGGCATCTGTCTTGGACCAAGCAAGATGTGGGGGCGAGCTGTGTG	2760
QY	961	CTGCGCACGCTACCCCTCCGGGCTCGTCACTGTGCCCATCTCTTAACATAGAGAGGT	1020
Db	2761	CTGCGCACGCTACCCCTCCGGGCTCGTCACTGTGCCCATCTCTTAACATAGAGAGGT	2820
QY	1021	GCTCTGTCTCACTACCGAGAGATCCCTTTATGSGCAAGGCTATTCCTTGAAGCAAT	1080
Db	2821	GCTCTGTCTCAACCGAGAGATCCCTTTATGSGCAAGGCTATTCCTTGAAGCTATC	2880
QY	1081	AAGGGGGGAGACATCTCATTTTCTGCCATCTCAAGAAAGATGCGAGACTGGCGCA	1140
Db	2881	AAGGGGGGAGACATCTCATTTTCTGCCATCTCAAGAAAGATGCGAGACTGGCGCG	2940
QY	1141	AAACGTGTGCGGTTGGGGGTCAAGCGGTGCTTACACGCGGCTTGAATGTGCGGTG	1200
Db	2941	AAAGCTGTGCGATTTGGGTCATTAAGTCGGTGCCTACTACCGCGGTCTTGAATGTGTG	3000
QY	1201	ATCCGACCAATGTGTGACGTTGTGTGTGTGCAACTGACGCGCTCATGACCGGCTTTAC	1260
Db	3001	ATCCGACCAACGGGGAGTTGTGTGTGTGTGACCGATGTCTCATGACCTGGCTTTAC	3060
QY	1261	GCGCATTTGCAATTGCGTATATGACTGTGCAACAGTGTGTCACTGACAGACAGTGAATTCAGC	3120
Db	3061	GCGCATTTGCACTGTGTATATGACTGTGCAACAGTGTGTCACTGACAGACAGTGAATTCAGC	3120
QY	1321	CTTGAACCTTCAACCATTTGAGACATACGCTTCCCGAGATGCTGTCCCGTACT	1380
Db	3121	CTTGAACCTTCAACCATTTGAGACATACGCTTCCCGAGATGCTGTCTTCAGAGACT	3180
QY	1381	CAAGCTCGGGGTAGGACTGTGCAGAGGAAAGCCAGGACCTTACAGATTTGTGTGCA	1440
Db	3181	CAAGCTCGGGGTAGGACTGTGCAGAGGAAAGCCAGGACCTTATATGATTTGTGTGCA	3240
QY	1441	GAGCGTCTTGTGGCATTTGAATCGTCTGTCTCTGTGCAAGTGTATGACGCGGTTGT	1500

Db 3241 GAGCGCCCTCCGGCATGTTGCACTGTCCTCTGTGAGTGTGATGACGCGGAGTGT 3300  
Qy 1501 GCTTGGTATGACCTTAACGCCCCCGGAGACACAGTTAGGCTACGAGCATATGAACACC 1560  
Db 3301 GCTTGGTATGACCTTAACGCCCCCGGAGACACAGTTAGGCTACGAGCATATGAACACC 3360  
Qy 1561 CCGGAGCTTCCCGTGTGCGCAAGACATCTGAAATTTTGGAGGGGCGTCTTTACGGGTC 1620  
Db 3361 CCGGAGCTTCCCGTGTGCGCAAGACATCTGAAATTTTGGAGGGGCGTCTTTACGGGTC 3420  
Qy 1621 ACCCATATGACGCGCCACTTCTATCCAGACAAAGACAGTGGGAAAACTCTCTAT 1680  
Db 3421 ACTCATATGATGACCCACTTTTATCCAGACAAAGACAGTGGGAGAACTTTCTTAC 3480  
Qy 1681 CTGGTATGCTACCAAGCCACCGTGTGCGGTAGAGCTCAAGCCCCCTCCCGCTGTGGAC 1740  
Db 3481 CTGGTATGCTACCAAGCCACCGTGTGCGGTAGAGCTCAAGCCCCCTCCCGCTGTGGAC 3540  
Qy 1741 CAGATGTGGAAGTCTGTATCCGCTCAAGCCACCTCATGGGCAACCTCTGCTA 1800  
Db 3541 CAGATGTGGAAGTCTGTATCCGCTTAAACCACTTCATGGGCAACCTCTGCTA 3600  
Qy 1801 TATAGACTGGGCGCTGTCCAGATAGATCACTTACCGACACCACTCACTCAATATATC 1860  
Db 3601 TACAGACTGGGCGCTGTCCAGATAGATCACTTACCGACACCACTCACTCAATATATC 3660  
Qy 1861 ATGACATGATATGCTGGCTACCTGAGAGTGTCTACAGATACCTGGGTCTCTTGGCGGC 1920  
Db 3661 ATGACATGATATGCTGGCTACCTGAGAGTGTCTACAGATACCTGGGTCTCTTGGCGGC 3720  
Qy 1921 GTTCTGTGCTTGTGGCCGCGATTTGCTATCCACAGGCTGCGGTCAATGATGATAG 1980  
Db 3721 GTTCTGTGCTTGTGGCCGCGATTTGCTATCCACAGGCTGCGGTCAATGATGATAG 3780  
Qy 1981 ATGTCTTGTCCGAAAGCCGCGCAATCATACCGACAGGAAATCTCTACCGGAGTTC 2040  
Db 3781 ATGTCTTGTCCGAAAGCCGCGCAATCATACCGACAGGAAATCTCTACCGGAGTTC 3840  
Qy 2041 GATGAATGGAAGATGCT 2059  
Db 3841 GATGAATGGAAGATGCT 3859

RESULT 5  
US-11-173-792-7  
; Sequence 7, Application US/11173792  
; Publication No. US2006019245A1  
; GENERAL INFORMATION:  
; APPLICANT: Rice III, Charles  
; APPLICANT: Blight, Keril  
; TITLE OF INVENTION: HCV Variants  
; FILE REFERENCE: 6029-4356  
; CURRENT APPLICATION NUMBER: US/11/173,792  
; CURRENT FILING DATE: 2005-07-01  
; PRIOR APPLICATION NUMBER: US/09/576,989  
; PRIOR FILING DATE: 2000-05-23  
; NUMBER OF SEQ ID NOS: 21  
; SOFTWARE: Patentin Ver. 2.0  
; SEQ ID NO 7  
; LENGTH: 7848  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
US-11-173-792-7

Query Match 67.0%; Score 1391.2; DB 8; Length 7848;  
Best Local Similarity 79.4%; Pred. No. 0;  
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

Qy 1 ATGGCGCCCTATACGCGCTTATGCTCCGACGACAGAGGGGCTTTGGAGTCAATATCACC 60  
Db 1801 ATGGCGCCCTATATACGCGCTTATGCTCCGACGACAGAGGGGCTTATGCTGATCACT 1860  
Qy 61 AACTTGACCGGCGGGAAGAAAAACAGTGGAGGTGAGGTTCAATGCTGTCACTGCT 120

Db 1861 AGCCTCAAGGCGGGGACAGGAACAGGTCAGAGGGGAGGTCAAGTGTCTCCACCGCA 1920  
Qy 121 GCCAGACTTTCTTGGCACTCTGATTAACGGGCTGTGTGGACTGTCTACATGAGGCC 180  
Db 1921 ACACATCTTTCTTGGCCACCTGCTCAATGAGCGGTGTGAGCTGTCTATCATGTGTC 1980  
Qy 191 GGAACAGAGCACTTGGCTCACTAAGGCTCTGTATTCAGATGATACCAATGTGAC 240  
Db 1991 GGTCAAGAACCTTTGCGGCGCCCAAGGAGCCCAATACCAATGATACCAATGTGAC 2040  
Qy 241 CAAGACTTGTAGCTGAGCCCGCTCCCAAGGTGCGCTCAATTAACATGACCTTGC 300  
Db 2041 CAGAGCTGTGTGCTGCAAGCGCCCGCGGGGCGGTCTTACACATGACCTGCG 2100  
Qy 301 GGTCTCTGAGACTTACCTGTGTCAAGGACAGCGGATGTATTCGTGTGCGGACGG 360  
Db 2101 GGCAGCTCGGACCTTTACTTGTGTCAAGAGGATGCGATGTCATTCGGGTGCGCGCG 2160  
Qy 361 GGTGATGGCAGGGGAGCGCTGTTGCGCCGCGCTATCTTTACTTGAAGGCTCTGCG 420  
Db 2161 GCGCAGACAGGGGAGGCTACTCTCCCAAGGCGGTCTCTACTTGAAGGCTCTTGC 2220  
Qy 421 GGAGGCTCTGTGTGCTGCGCAGAGCATGCGGTAGGCAATTAAGAGCCCGGTATGC 480  
Db 2221 GCGGCTCACTGTCTGCGCCCTCGGGGAGACGTGTGGCATCTTTGCGGCTGCGGTGCG 2280  
Qy 481 ACCGTGGAATGTGCTAAGCGGTGAGCTTCACTCCCGTAGAGAGCTTGAAGCAACATG 540  
Db 2281 ACCGTGGAATGTGCTAAGCGGTGAGCTTCACTCCCGTAGAGAGCTTGAAGCAACATG 2340  
Qy 541 AGGTCCCGGCTGTCTGAGCAACCTCCCGACAGAGTGGCCGAGCTACCAAGTG 600  
Db 2341 GGTCCCGGCTGTCTGAGCAACCTCCCGACAGAGTGGCCGAGCTACCAAGTG 2400  
Qy 601 GCCCACTGCAATGCTCCACCGGAGCGGTAAAGACACCAAGTCCCGCGCATACGCA 660  
Db 2401 GCCCACTGCAACGCGCTACTGTGTAGCGGCAAGACCAATAGGTCCCGCTGATGCA 2460  
Qy 661 GCTCAGGCTTACAGGTGTGTGCTCAACCTCTCGTTGTGCAACAATGGGCTTTGGT 720  
Db 2461 GCTCAGGCTTACAGGTGTGTGCTCAACCTCTCGTTGTGCAACAATGGGCTTTGGT 2520  
Qy 721 GCTTACATGTCCAGAGCCCATGGATGATCTCTACATCAGGACTGGGGTGAGCAAT 780  
Db 2521 GCTTACATGTCTAAGGCAATGTATGCACTCTTACATCAGAGCGGGTAAAGACATC 2580  
Qy 781 ACTATGCGAGCCGATACGATATTCACCTACGCAAGTTCCTTGCCGACGCGGTGT 840  
Db 2581 ACNAGGGTGGCCCATACGATACCTACGCAAGTTCCTTGCCGACGCGGTGTGTC 2640  
Qy 841 TCAGGGGCTCTTATGACATATATTTGTGACAGTGTGCTCCAGGATCAACATTC 900  
Db 2641 TCTGGGGGCGCTTATGACATATATTTGTGAGTGTGCTCACTCACTGACCTGCACT 2700  
Qy 901 ATCTTGGCATTTGACACTGTCTCTTGAACAAGAGAGACGCGGGGCGAGACTGCTG 960  
Db 2701 ATCTTGGCATTTGACAGTCTCTTGAACAAGGAGAGAGCGCTGAGCGGACTGCTGCTG 2760  
Qy 961 CTGCGCACCGCTACCCCTCGGGCTCGTCACTGTGCCCCATCTTAATCAGAGAGTT 1020  
Db 2761 CTGCGCACCGCTACCGCTCGGGATCGGTCACTCGGACATCCAAATCAGAGAGGTT 2820  
Qy 1021 GCTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTTAAGCAATT 1080  
Db 2821 GCTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTTAAGCAATT 2880  
Qy 1081 AAGGGGGGAGACATCATCTTCTGCACTCAAGAAAGAGTGGAGAGAGTGGCGCGCA 1140  
Db 2881 AAGGGGGGAGACATCATCTTCTGCACTCAAGAAAGAGTGGAGAGAGTGGCGCGCG 2940  
Qy 1141 AAATGCTGTGCGGTGTGAGTGTGCAATGCGGTGCTTACTACCGGCGCTTGATGTGCTGTC 1200

2941 AAGCTGCCGCGCTCGAGCTCAATGCTGATATTAACGGGGCGCTTGATATCCGTC 3000  
1201 ATCCGACCAAGTGTGACGTTTCTGTCGCACTGACGCGCTTATGACCGGCTTTACC 1260  
3001 ATACCAACTGAGCGGAGACCTCATTTGCTGAGCAACGGAGCTCTAATGACGGGCTTTTACC 3060  
1261 GCGGCACTTCGATTCGCTGATAGACTGCAACAGTGTGTCAACCCAGACAGTTCGACTTACG 1320  
3061 GCGGATTTTGCATGCTAGTATGATGCTGCAATATGATGTGACCCAGACAGTTCGACTTACG 3120  
1321 CTGACCCCTTACCTTCACTTGAACATCAAGCTTCCAGAGTGTCTCCGCTACT 1380  
3121 CTGACCCGACCTTCACTTGAACATCAAGCTTCCAGAGTGTCTCCGCTACT 3180  
1381 CAACCTCGGGGTAGAGCTGGGCAAGGAAACGAGGATTTAAGATTTTGTGGACCGGG 1440  
3181 CAGCGGCGAGGAGGAGCTGGTGGGAGGAGATGGGATTTTAAAGTTTGTGCTCCAGGA 3240  
1441 GAGCGTCTTCTGCGACGTTTGAATGCTGTCTCTCTGCGAGTGTATGACCGGGTGT 1500  
3241 GAAACGCGCTCGGGCATGTTGATCTCTGCTGTCTGTGATGCTATGACCGGGCTGT 3300  
1501 GCTTGTATGAGCTTACCGCCGCGGACCAAGATTAGGCTTACGAGCATATGAAACACC 1560  
3301 GCTTGTATGAGCTTACCGCCGCGGACCAAGATTAGGCTTACGAGCATATGAAACACA 3360  
1561 CCGGACCTTCCGCTGTGCGCAACCATCTTGAATTTTGGAGGGGCTTTTACGGGTCTC 1620  
3361 CCGAGGTGCGCGTGTGCGCAACCATCTGAGATTTTGGAGAGGGCTTTTACAGGCTTC 3420  
1621 ACCCATATGAGCGGCACTTCTTATCCAGCAAAAGAGAGGAGGAAACCTTCCCTAT 1680  
3421 ACCCATATGAGCGGCACTTCTTATCCAGCAAAAGAGAGGAGGAAACCTTCCCTATC 3480  
1681 CTGGTATGAGCTTACCAAGCTTACGCTGTGCGCAAGGCTTACAGCTTCACTGTGGAGC 3540  
3481 CTGGTATGAGCTTACCAAGCTTACGCTGTGCGCAAGGCTTACAGCTTCACTGTGGAGC 3540  
1741 CAGATGTGAGAGTGTCTGATCCGCTCTCAAGCCCACTTCACTGGGCAACACTTCTGCTA 1800  
3541 CAAATGTGAGAGTGTCTGATCCGCTTAAAGCTTACGCTTCACTGGGCAACACTTCTGCTG 3600  
1801 TATAGACTGGGCGCTGTCCAGATGAGTACCTTGAAGCACTTCACTGGGCAACACTTCTGCTG 1860  
3601 TATAGACTGGGCGCTGTCCAGATGAGTACCTTGAAGCACTTCACTGGGCAACACTTCTGCTG 3660  
1861 ATGACATGATGTGCGCTGACCTTGAAGTGTCTCAAGAGTACCTTGGGTGCTCTTGGCGG 1920  
3661 ATGACATGATGTGCGCTGACCTTGAAGTGTCTCAAGAGTACCTTGGGTGCTCTTGGCGG 3720  
1921 GTTCTGGCTGCTTTTGGCGCGCTGATTTGCTTATCAAGAGTGTGCTTATGATGAGTACG 1980  
3721 GTTCTGGCTGCTTTTGGCGCGCTGATTTGCTTATCAAGAGTGTGCTTATGATGAGTACG 3780  
1981 ATGTCTTGTCCGGAAGCGCGGCAATCATACCGGACAGGAGTGTCTTCACTGGGAGTTC 2040  
3781 ATCATCTTGTCCGGAAGCGCGGCAATCATACCGGAGTGTCTTCACTGGGAGTTC 3840  
2041 GATGAATGGAAGAGTGC 2058  
3841 GATGAGATGGAAGAGTGC 3858

RESULT 6  
US-10-509-921-9

; Sequence 9, Application US/1050921  
; Publication No. US20050250093A1  
; GENERAL INFORMATION:  
; APPLICANT: SmithKline Beecham Corporation  
; TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons  
; FILE REFERENCE: P51335  
; CURRENT APPLICATION NUMBER: US/10/509,921  
; CURRENT FILING DATE: 2004-10-01

; PRIOR APPLICATION NUMBER: 60/369,685  
; PRIOR FILING DATE: 2002-04-03  
; NUMBER OF SEQ ID NOS: 54  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 9  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: The polynucleotide sequence encodes sequences from  
US-10-509-921-9

Query Match 67.0% Score 1381.2; DB 7; Length 7979;  
Best Local Similarity 79.4%; Pred No. 0;  
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

1 ATGGCGCTTATCAGCGCTTATGCTCCAGAGCAAGAGGAGCTTTTGGATGCAATATCAC 60  
1801 ATGGCGCTTATGAGGCTTATGAGGCTTATGAGGCTTATGAGGCTTATGAGGCTTATGAG 1860  
61 AGCTTACCGGCGCGGCAAAACAGGTGAGGTGAGGTTCAGATGCTTCAACTGCT 120  
1861 AGCTTACAGGCGCGGCAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1920  
121 GCGGACCTTCTTGGCAACCTGATTAACGCGGCTGTGTGAGCTTATGAGGAGGAGGAGG 180  
1921 ACACATCTTCTCTGAGCACTGCTCAATGAGCTGTGTGTGAGCTTATGAGGAGGAGGAGG 1980  
181 GGAAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 240  
1981 GGCCTAAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2040  
241 CAAGACTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 300  
2041 CAGGAGCTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2100  
301 GCGCTCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 360  
2101 GCGAGCTGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2160  
361 GGTGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 420  
2161 GCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2220  
421 GAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 480  
2221 GCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2280  
481 ACCGCTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 540  
2281 ACCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2340  
541 AGGTCCCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 600  
2341 GGTGCTCCGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2400  
601 GCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 660  
2401 GCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2460  
661 GGTGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 720  
2461 GCGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2520  
721 GCTTATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 780  
2521 GGTGATGATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2580  
781 ACTATGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 840  
2581 ACAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAG 2640

Oy	841	TCAGGGGTGCTTATGACATATAATTTGTCACAGAGGCCATCTCACGGATGCAACATCC	900
Db	2641	TCGTGGGGCGGCTATGACATCATATAATGATAGTGCACCTCACTGACTGCACCACT	2700
Oy	901	ATCTTGGGCATTTGGCATCTGTCTCTTGAACCAAGCAGAGACCGGGGGGGCGAGACTGATCTGTG	960
Db	2701	ATCTCTGGGCATTCGGCACAGTCTCTGGACCAAGCGAGAGAGCGCTGGAGCCGCACTCGTCTGTG	2760
Oy	961	CTCGCCACCGTACCCCTCCGGGGCTCGTCACTGTGCCATCTCTAACATTCAGAGAGT	1020
Db	2761	CTCGCCACCGCTACCGCTCCGGGAGTCGGTCAACGGGCCACATCCCAACATTCAGAGAGTGTG	2820
Oy	1021	GCTCTGTCCACTACCGGAGAGATCCCCCTTTATGCGAAGGCTATTTCCCTTGAAGCAATT	1080
Db	2821	GCTCTGTCCACACTCGAGGAATCCCCCTTTATGCGAAGGCTATTTCCCTTGAAGCAATC	2880
Oy	1081	AAGGGGGGGAGACATCTCATCTTCTGCGCACTCAAGAAAGAGTGCAGACGACTGCGCGCA	1140
Db	2881	AAGGGGGGGAGAGCACCTCATTTTCTGCAATTCAGAGAGAAATGTGATGAGCTGCCGCG	2940
Oy	1141	AAACTGTGTGGGTGGGGCTCAATGCGTGGCTTAACTACGCGGCGCTTGAATGTGTCCGTC	1200
Db	2941	AAGCTGTCCGGCGCTCGGACTCAATGCTGTAGCATATTACCGGGGCGTTGAATGTATCCGTC	3000
Oy	1201	ATCCCGACCAATGGTGTGAGTGTGTGTGTGTGGCACTGACGCGCTCTATGACCGGCTTTACC	1260
Db	3001	ATACCAATTAACGGAGAGCTATGTGTGTACCAACGAGCGCTCTAATGACCGGCTTTAAC	3060
Oy	1261	GGCGCACTTCGATTCGGTATGACTGCAACACGTGTGCACCCGACAGACAGTGCATTCAGC	1320
Db	3061	GGCGATTTTCGACTCAGTATGACTGCACAAATATGTGTGCACCCGACAGACAGTGCATTCAGC	3120
Oy	1321	CTTGCACCTTACCTTACCATTTGAACAATCACGCTTCCCGAGATGCTGTCTCCGTACT	1380
Db	3121	CTGGAACCGGACCTTACCATTTGAACAACGACGCGCAAAAGCGGCTGTCACTGCTCG	3180
Oy	1381	CAAGTCGGGGGTAGACTGCGCAGAGGGAGCCAGGCACTTCAAGATTTGTGTGACCGGGG	1440
Db	3181	CAGCGGCAGGACAGACTGTGTAGGGGCGAGATGGGCACTTTCAGATTTGTGTATCTTCAGGA	3240
Oy	1441	GAGCGTCCTTCTGGGATGTTTGACTCGCTGTGCCCTGTCGAGTGTATGAGCGCGGGTGT	1500
Db	3241	GACCGGCCCTCGGGCATTTGATTTCTTCGGTTCTGTCCAGTGTATGACCGGGCTGT	3300
Oy	1501	GCTTGTATGAGCTTACGCGCCGCGAGACCAAGTTAGGCTTACGACATACATGAACACC	1560
Db	3301	GCTTGTATGAGCTTACGCGCCGCGAGACCTCAAGTTAGGCTTACCTAAACACA	3360
Oy	1561	CCGGGACTTCCCGTGTGCCAAGACCATTTTGAATTTTGGAGGGCGTCTTTACGGGTCTC	1620
Db	3361	CCAGGGTTCGCCGTCTGCGAGAGCCATCTGAGAGTTCGGGAGAGCGTCTTTACAGGCTTC	3420
Oy	1621	ACCACATAGACGCCCATCTTCATTCGCCAGCAAAAGCAAGATGGGGAAAACCTTCCCAT	1680
Db	3421	ACCACATAGACGCCCATTTTCTTGTCCAGACTAGACAGGACAGAGACAACTTCCCTTAC	3480
Oy	1681	CTGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGCTCGTGGGAC	1740
Db	3481	CTGTAGCATACAGGCTTACGCTGTGGCGCCAGGGCTCAGGCTCCACCTCATCGTGGGAC	3540
Oy	1741	CAGATGTGAAGTGTGATCCGTCTCAAGCCACCTTCAATGGGCCCAACCTCTGTCTA	1800
Db	3541	CAAAATGTGAAGTGTCTATACCGCTTAAAGCTTACGCTGCACCGGGCCAAACCCCTGTCTG	3600
Oy	1801	TATAGACTGGGCGCTGTCCAGAAATGAATCACCCGACGCAACCAAGTACCAAGTATATTC	1860
Db	3601	TATAGGCTGGAGCGGCTTCAAAACGAGGTATCTACACACACCCATTAACCAATATCATTC	3660
Oy	1861	ATGACATGTATGTCCGCTGACCTGTGAGGTCTGCACGATTACTGTGGGTCTCGTTGCGGC	1920
Db	3661	ATGGAATGATATGTCCGCTGACCTGTGAGGTCTGCACGAGCACTGGGTCTCTGTAGCGGA	3720
Oy	1921	GTTCGAGCTGCTTTGGCGCGTATTTGCTATTCACAGGCTCGTGTGCTATGATGATAGG	1980

Accession	Sequence	Position
Db	3721 GTCTTACAGCTCTGGGCGCGGTATTGCTGACACAGGCGCGGTGTCATTGTGGCGAGG	3780
Qy	1981 ATTGTCTTGTCCGGAAGCCGGCAATCATYACCGACAGGGAAGTCTCTYACCGGAGTTC	2040
Db	3781 ATCATCTTGTCCGGAAGCCGGCCATCATYCCGACAGGGAAGTCTTACCGGAGTTC	3840
Qy	2041 GATGAATGGAAGAGTGC	2058
Db	3841 GATGAGATGGAAGAGTGC	3858

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RESULT 7
US-10-509-921-10
; Sequence 10, Application US/10/509921
; Publication No. US20050250093A1
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OP INVENTION: Hepatitis C Virus Sub-Genomic Replicons
; FILE REFERENCE: P51335
; CURRENT APPLICATION NUMBER: US/10/509,921
; CURRENT FILING DATE: 2004-10-01
; PRIOR APPLICATION NUMBER: 60/369,685
; PRIOR FILING DATE: 2002-04-03
; NUMBER OP SEQ ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 10
; LENGTH: 7979
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Thepolynucleotide sequence encodes sequences from
; OTHER INFORMATION: HCV J4(C34/R1(C))Replicons
US-10-509-921-10

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Query Match	67.0%;	Score 1381.2;	DB 7;	Length 7979;
Best Local Similarity	79.4%;	Pred. No. 0;		
Matches 1635;	Conservative 0;	Mismatches 423;	Indels 0;	Gaps 0;

OY	1	ATGCGCGCTTATCAGGGCGCTTATGCCAGACACAAAGGGCGCTTTTGGGATGATATATACC	60
Db	1801	ATGGCGCGCTTATACGGCGCTACTCTCCAAACAGACGGGAAGCCCTACTTGGCTGATATACCT	1860
OY	61	AGCTTGACCGCGCGGGACAAAACCCAGGTGAGGGGTGAGTTGAGATCGTGTCAACTGCT	120
Db	1861	AGCTTCACAGCGCCGGGACAGGAACCAAGTGCAGGGGGGAGGTCCAAAGTGTCTCACCGCA	1920
OY	121	GCCCGAGCTTTCCTTGGCAACCTGCAATTAACGGGTGTGTGGACTGTCTACATGAGACC	180
Db	1921	ACACAATCTTTCCTGGGAGACCTGCGTCAATGAGCGCTGTGTGGACTGTCTATCAATGAGTCC	1980
OY	181	GGAAACAAGAACCATTTGGGTCAACCTTAAGGGTCTGTATCCAGATGTACCAATGTGAGAC	240
Db	1981	GGCTTAAGAACCTTTCGGCCGGCCAAAAGGGCCCAATACCAATATGTAACCAATGTGAGAC	2040
OY	241	CAGAAGCTCGTAGGCTGAGCCGCTCCCCAAGTGGCCCGCTCATTTAACCAATGACACTTGC	300
Db	2041	CAGAACCTCGTGGCTGGCTGGCAAGGCGCCCCCGGGGGCGGTTCTTGACACCATGACCTGCG	2100
OY	301	GGCTTCCTGGAACTTTTACCTGTGTACGAGGACGCGCGATGTCAATTCCTGTGCGCCGACGG	360
Db	2101	GGGAGCTCGGAGCTTTTACTTGGTGTACGACGAGCATGCGCATGTCAATTCGAGTGGCGCGGG	2160
OY	361	GGTATGAGCAGGGGAGCGTGTCTTTCGCCCGGCGCTTATCTTTTACTTTGAAGGCTCTGCG	420
Db	2161	GGGCAACAGACAGGGGAGGAGCTACTTCTCCCAAGGCGCGTCTCTCTACTTTGAAGGCTCTTTCG	2220
OY	421	GGAGGCGCTTGTCTGTGTCCCGGACAGACATGCGCGTAGGCAATTTACAGAGCGCGGTAATGC	480
Db	2221	GGGCGTCCACTGTCTGTGCCCTCTGGGGGACGCTGTGGGCATCTTTTCGGGCTGCGCGTGTGC	2280
OY	481	ACCGGTGAGTGTGCTTAAGGGGTGTGACTTCAATCCCGGTAGAGACTTTAGAGACAACATG	540





OY	181	GGAAACAAGACATTTGGCGTCAACTTAAGGGTCTGTATTCCAGATGACAGTACCAATGTGGAC	240
Db	1961	GGCTAAAGACCTTTGGCCGGCCAAAGGGCCCAATACCCAAATGTACCAAGTGGAC	2040
OY	241	CAAGACCTCGTAAGGCTGGCCCGCTCCCAAGGTGCCCCGTCATTTAACAACATGTACCTTGC	300
Db	2041	CAGAGACTGTGTGGCTGGCAAGCGCCCCCGGGGGCGCTTCTTGACACATGTACCTTGC	2100
OY	301	GGCTCTCGAACCTTTACCTGGTTCAGAGGACACGCCGATGTCAATTCTGTGGCCGACCG	360
Db	2101	GGCAGACTGGGACCTTTACTTGGTTCAGAGGACATGCCGATGTCAATTCCCGGTGCGCGCG	2160
OY	361	GGTATGTGCAAGGGAGAGCGCTGCTTTGGCCCCGGGCTATCTCTTACTTGAAGAGGCTCCGCG	420
Db	2161	GGCGACAGAGGGAGAGGCTACTCTCCCAAGGCCGCTCTCTACTTGAAGAGGCTCTTGC	2220
OY	421	GGAGGCGCTGTGCTGTGGCCCCGCAAGACATGCCGTAGGACATATTCAGAGCGCGCGGTATGC	480
Db	2221	GGCGGTTCACATGTCTGTGCCCTCCGGGGGACGCTGTGGGACATCTTTCGGGCTGCGGTGTGC	2280
OY	481	ACCGGTGAGTGGCTTAAGGCGGTGACCTTCAATCCCGTAGAGACTTAAGACACAACATG	540
Db	2281	ACCGGAGGGGTTCGAGAGGCGGTGACCTTGTGATACCCGTGAGTATGAAACAACATATG	2340
OY	541	AGGTCCCCGGGTGTTCTCAACAACCTCCCTCCACAGAGATGGCCCAAGCTACCAAGTG	600
Db	2341	CGGTCCCCGGGTCTTCAAGGACCAACCTGTCCCTCCGCGCGTACCGCAACATTTCCAGGTG	2400
OY	601	GGCCACCTGCATGTCTCCACCGGCGAGCGGTAAAGACCAAGATGCCGGCGCATACGCA	660
Db	2401	GGCCATCTACACGCCCTTACTGTGTAGCGGCAAGAGACCTTAAGATGGTCGGGCTGGTATGCA	2460
OY	661	GCTCAGGCTTACAAGGTGCTGGTCTCAACCCCTCCGTTGCTGCAACAATGGGCTTTGGT	720
Db	2461	GGCCAAAGGTTTAAGGTGTCTGTCTGTAACCCGATCCGTCCGCCACCACTTAGTTTGGG	2520
OY	721	GCTTACATGTCCAAAGGCCCATGGGATTTGATCTTAACTACAGACTGGGGGTAGGACATTT	780
Db	2521	GGGTATATGTCTTAAGGACATGTGTGACACCTTAACTACAAACCGGGGTAAAGACATTC	2580
OY	781	ACTACTGGCAGCGCCGATCAGCTATTCGCACTACGGCAAGTTCTTGGCGGAGGGGGT	840
Db	2581	ACCAAGGATGGCCCCCATACGTACTTCACTCACTTAGGCAAGTTTCTTGCCGACGGTGTTC	2640
OY	841	TCAGGGGGTGTCTTATGACATATATATTTGTGACGAGTGCACATCCACGGATGCAACATCC	900
Db	2641	TCGGGGGGCGCTATGACATCATATATATGTGATGTGTCACATCACTGATCGACACT	2700
OY	901	ATCTTGGGCATTTGGCATCTGTCTTBAACAAGACAGACCGGGGGGCGACCTGACTGTG	960
Db	2701	ATCTCGGGGCATTCGGACATCTGTGACCAAGCGAGAGAGGGGTGAGCGCGACTGTGTGTG	2760
OY	961	CTCGGCACCGCTACCCCTCCGGGGCTCGGTCACTGTGACCCCATTCCTAAACATAGAGAGGTT	1020
Db	2761	CTCGGCACCGCTAGCGCTCTCCGGGATCGGTACCGTGCACATTCCAAACATAGAGAGGTTG	2820
OY	1021	GCTCTGTCCACTACCGGAGAGATGCCCTTTTATGGCAAGGCTATTTCCCTTGAAGCAATT	1080
Db	2821	GCTCTGTCCAGCATCGAGAAATGCCCTTTTATGGCAAAAGCATGCCATGAGAGCATC	2880
OY	1081	AAAGGGGGGAGACATCTCATCTTCTTGCCCATTCAAAGAAAGATGGAGAGAGCTGCGGCA	1140
Db	2881	AAAGGGGGGAGAGCACTCATATTTTCTGCCATTTCAAAGAAAGATGTGATGACTGCGCGG	2940
OY	1141	AAACTGTGTGCGTTGGGGGTCAAATGCCGTGGCTTACTACCGCGCTTGAATGTGTCCGTC	1200
Db	2941	AAAGCTGTCCGCTTCGGACTCAATGTCTAAGATATTAACCGGGGCTTGAATGTATCCGTC	3000
OY	1201	ATCCGCACAGTGTGATGAGTTGTCTGTCTGGCACTGACGCCCTCATGACCGGCTTTAAC	1260
Db	3001	ATACCAACTTAGGGAGAGCGTCACTTGTGTGACAGACGACGCTCTATATACCGGGCTTTAAC	3060
OY	1261	GGCGACTTGCATTCGGTGAATGACTGCAACAGTGTGTACCCACAGACGTGACTTCAGC	1320

Db	3061	GGCGATTTCCAGCTCAGTGTATGCACTTGCAATATCATGTGTCAACCCAGACAGTGCATTTCAAGC	3120
QY	1321	CTTGAACCTTACCTTACACATTGAGACAATCAACGCTTCCCGAGATGCTGTCTCCGTA	1380
Db	3121	CTGGACCCGACCTTACCACTTGAACGACGACCGTGCCACAAAGACGGCGTGTCAAGCTCG	3180
QY	1381	CAAGCTCGGGGTATAGACTGCGACAGGGGAGGCAAGCCAGGACTCTACAAATTTGTGGACACGGGG	1440
Db	3181	CAGGGCCAGGCAAGACTGTATGGGGGACAGATGGGCAATTTACAGTTTGTATCTTCAGGA	3240
QY	1441	GAGCGCTCTTGTGGCATGTATTGAATCGGTGTCTCTGCGAGTGCCTAATGACGCGAGTGT	1500
Db	3241	GAAAGGCTCTGGGCAATTTGATTTCTTCGTTTCTGTACAGTCTATGACCGGGCTGT	3300
QY	1501	GCTTGTATGAGCTTACGCGCCGCGAGACCAAGTTAGGCTTACAGACATACATGAACAC	1560
Db	3301	GCTTGTATGAGCTTACGCGCCGCGAGACCTCAATTAGTTGGGGGCTTACTTAACACCA	3360
QY	1561	CCGGGACTTCCCGTGTGCGCAAGACATCTTGAATTTTGGAGGGCGTCTTTACGGGTCTC	1620
Db	3361	CCAGGGTTCGCCGCTCTGCGACAGAACATCTGGAGTTCTGGGAGACGCTTTTACAGGCTTC	3420
QY	1621	ACCCACATAGACGGCCACTTCTATTCACAGCAAGACAGAGTGGGGAACCTTCCCTAT	1680
Db	3421	ACCCACATAGACGGCCACTTCTTCTCCAGCTAAGACAGGCGAGAGCAACTTCCCTAC	3480
QY	1681	CTGGTAGCGTATCCAAAGCCACCGTGTGCGTATGAGCTCAAGCCCTCCCGCTGTGGAC	1740
Db	3481	CTGGTAGCATACAGGCTTACGGTGTGTGGCCAGGGCTCAGGCTCACTCATCTGTGGGAC	3540
QY	1741	CAGATGTGAAGTGTGTATCCGTCTCAAGCCACCTTCATGGGCCCAACCTGTCTCTA	1800
Db	3541	CAATGTGTGAAGTGTCTCAATAGGCTTAAGGCTTACGCTGCACGGGCCAAACGCCCTCTGTG	3600
QY	1801	TATAGACTGGGCGCTGTCCAGATGGAAGTCAACCTTACGCAACCCAGTCAACCAATATATC	1860
Db	3601	TATAGGCTGGGAGCGCTTCAAAAGAGGTTATCTACACACACCCCAATPAACCAATATATC	3660
QY	1861	ATGACATGTATGTGGGCTGACCTGAGAGTGTCTACAGATACCTGAGGTGCTGTGGCGGC	1920
Db	3661	ATGGATGTCAATGTGGGCTGACCTGAGAGTGTCTACAGACACTTGGGTGTGTGTGGCGGA	3720
QY	1921	GTTCTGGCTGTGTGGCGCGTATTTGGCTATCCACAGGCTGCGTGTCTATATGATGTAGG	1980
Db	3721	GTTCTAGAGGCTCTGGCGCGGTATTTGCTGACAAACAGCACGCGTGTCTATGTGGGAGG	3780
QY	1981	ATTGTCTTGTTCGGAAGCCGGCAATCAATCCGACAGGGAAGTCTCTACCGGGAAGTTC	2040
Db	3781	ATCATCTTGTTCGGGAAGCCGGCCATCATCTCCGACAGGGAAGTCTTTACCGGGAAGTTC	3840
QY	2041	GATGAATGGAAGAGTGC	2058
Db	3841	GATGAGATGGAAGAGTGC	3858

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/ RESULT 9
/ US-10-509-921-5
/ Sequence 5, Application US/10509921
/ Publication No. US20050250093A1
/ GENERAL INFORMATION:
/ APPLICANT: SmithKline Beecham Corporation
/ TITLE OF INVENTION: Hepatitis C Virus Sub-Genomiy Replicons
/ FILE REFERENCE: P51335
/ CURRENT APPLICATION NUMBER: US/10/509,921
/ CURRENT FILING DATE: 2004-10-01
/ PRIOR APPLICATION NUMBER: 60/369,685
/ PRIOR FILING DATE: 2002-04-03
/ NUMBER OF SEQ ID NOS: 54
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 5
/ LENGTH: 7980
/ TYPE: DNA
/

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ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Thepolynucleotide sequence encodes sequences from  
OTHER INFORMATION: HCV H77 (BB7-F3(C)) Replicons  
US-10-509-921-5

Query Match 67.0%; Score 1381.2; DB 7; Length 7980;  
Best Local Similarity 79.4%; Pred. No. 0;  
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

QY 1 ATGGCGCTATACGCGCTTANGCCAGCAGACAGAGGCGCTTTTGAGATGATATACACC 60  
DB 1801 ATGGCGCTATATACGGCTACTCCACAGAGAGCGAGGCTTACTGGCTGATCATCACT 1860  
QY 61 AGCTTGACCGCGCGGAGCAAAAACAAGTGGAGGGTGAAGTTCAATCGTGCAACTGT 120  
DB 1861 AGCTTGACAGCGCGGAGCAAGAAACAAGTGGAGGGTGAAGTGAAGTGTCTCCACCGA 1920  
QY 121 GCCCAGACTTTCTTGGCAACCTGCAATTAACGGGGTGTGTGGACTGTCTACCATGAGCC 180  
DB 1921 ACACAAATCTTCTGCGCACTGCGCTCAATGCGGTGTGTGGACTGTCTATATGTCCTC 1980  
QY 181 GGAAACAGAGACCAATTCGCTCACCTAAGGCTCTGTATTCAGATGTACACCAATGTGAC 240  
DB 1981 GGCTCAAGAGACCTTGGCGGCGCCAAAGGGCCCAATCACCAATATGTACCAATGTGAC 2040  
QY 241 CAAGACCTCTGATGCTGCGCGCTCCCAAGTGGCGCTCATTTAACCAATGCACTTGC 300  
DB 2041 CAGGACCTGCTGCGTGGCAAGCGCGCCCGGGGGCGCTTCTTCAACCAATGCACTGCG 2100  
QY 301 GGCCTCTGAGACCTTTACCTGTGCAAGAGGACGCGCATGTCAATTCGTGTGCGCGAGCC 360  
DB 2101 GGCACCTGAGACCTTTACTTGTGTCAAGAGGACATGCCATGTCAATTCGCTGTGCGCGG 2160  
QY 361 GGTGATGCGAGGGAGCGCTGCTTTTCCCGCGCTTATCTTACTTGAAGAGCTCTCG 420  
DB 2161 GGCGACAGAGGGAGGAGCTTACTTCTCCCGAGCGGCTCTTACTTGAAGGGCTCTTCG 2220  
QY 421 GAGAGCCCTCTGCTGTGCGCGGAGACATGCCATGAGATTTACAGAGCGCGGTATGC 480  
DB 2221 GGCGGTGCACTGCTCTGCGCGCTGCGGAGCGCTGTGGGATCTTTGCGGCTGCGGTGCG 2280  
QY 481 ACCCGTGAAGTGGCTAAGGCGGTGAGCTTCACTCCCGTAGAGAGCTTAGAGACAACATG 540  
DB 2281 ACCCGAGGGGTTCGAGAGCGGTGAGCTTGTATCCCGTGAAGTCTATGAGAAACCACTATG 2340  
QY 541 AGGTCCCGCGGTGTCTCAGACAACCTCTCCCAAGAGAGTCCCGCAGAGTACCAAGTGC 600  
DB 2341 CGGTCCCGGTCTTACAGGACAACCTGTCCTCCGGCGGTACCGGAGCATTTCCAGGTG 2400  
QY 601 GCCCAGCTGCACTGCTCCACCGCGAGCGGTAAAGACCAAGGTCCCGGCGCATACGCA 660  
DB 2401 GCCCATCTACACGCGCTTACTGTAGCGGCAAGAGACATTAAGTCCCGCTGCGATGCA 2460  
QY 661 GGTGAGGGCTAAGAGTGTGCTGTCACACCCCTCGGTGTCGAACAATGAGGCTTTGGT 720  
DB 2461 GCCCAAGGGTATAGAGTGTGCTGTCTTGAACCGGTGCGGTGCGGCACTTAAGTTTCGGG 2520  
QY 721 GCTTACATGTCCAGAGCCCATGAGATGTATCTTAACATCAGAGACTGGGTGAGACAAT 780  
DB 2521 GGTATATGTCTMAAGGACATGATTCAGACCTTAACATCAGAACCGGGGTAAAGACATTC 2580  
QY 781 ACTTACTGCAAGCGCGATCAGATATTCACCTTACGGCAAGTTCCTTGGCGAGCGGGGT 840  
DB 2581 ACCAGGGGTGCGCCCATCAAGTATCCATCTATGGAAGTTCCTTGGCGAGCGGTGATTC 2640  
QY 841 TCAGGGGGGTCTTATGACATTAATTTGTGAGAGTGCACATCCAGGATCAACATTC 900  
DB 2641 TCTGGGGGGCTTATGACATCAATATATGTATGATGATGCTCACTCACTGACACTT 2700  
QY 901 ATCTTGGGATTTGGCACTGTCTCTTGAACCAAGAGAGACCGCGGGGCGAGACTGACTGTG 960  
DB 2701 ATCTTGGGATCTGGGACAGTCTCTGAGACCAAGCGGAGAGCGGTGAGCGGGACTCGTCTG 2760

QY 961 CTCGCCACCGCTACCCCTCCGGGCTCCGCTCACTGTGCCCCCATCTAATCATGAGAGTT 1020  
DB 2761 CTCGCCACCGCTACCCCTCCGGGATCGGTCAACCGGTGCAATCAATCAATCAGAGAGGT 2820  
QY 1021 GCTCTGTCACTACCGGAGAGATCCCTTTATAGCAAGCTATTCCTCTTGAACCAAT 1080  
DB 2821 GCTCTGTCCAGACTGAGAAATCCCTTTATAGCAAGCATCCCATCGACAGACATTC 2880  
QY 1081 AAGGGGGGAGACATCTATCTTGTGCGACATCAAGAAAGTGGAGAGTGGCGGCA 1140  
DB 2881 AAGGGGGGAGACATCTATTTTGTCCATTCCAAAGAAATGTGATGAGTCCCGG 2940  
QY 1141 AAATGTGTGCGGTTGGGCGTCAATGCGGTGCTTACTACCGCGCTTATGTGTCCGTC 1200  
DB 2941 AAGCTGTCCGCGCTGAGACTCAATGCTGTAGCATATTAACGGGCGCTTATGTATCCGTC 3000  
QY 1201 ATCCGACCAAGTGTGAGCTTGTGCTGTGCAATGACGCTCATGACCGGCTTTAAC 1260  
DB 3001 ATACCAACTAGCGGAGAGCTCATTTGTGTAGCAACGACGCTCTAATGACGGGCTTTAC 3060  
QY 1261 GCGCACTTGATGCTGTGTATGACTGCAACAGTGTGCAACCCAGACATGCACTTCAAC 1320  
DB 3061 GCGCAATTCGACTCAGTATGCACTGCAATATGATGTACCCAGACAGTGCATTCAGAC 3120  
QY 1321 CTGACCCCTACCTTACCAATGAGCAATCAAGCTTCCCGAGATGCTGTCCCGTACT 1380  
DB 3121 CTGACCCGACCTTACCAATGAGCAACAGACGCTGCAACAGACGCGGTGACGCTG 3180  
QY 1381 CAACGTGCGGGTGAAGCTGCGAGAGAGAACCGGCACTTACAGATTTGTGACCGAGG 1440  
DB 3181 CAGCGGCAAGGAGAGACTGTGTGGGAGAGATGAGCAATTTACAGTTGTGACTCAAGA 3240  
QY 1441 GAGGCTCTTGTGAGATGTTTGAATCTGTCTGTCTGCGAGTGTATGACCGGGGTGT 1500  
DB 3241 GAACGCGCTCGGGATGTGTGATTCCTGCGTCTGTGCGAGTGTATGACCGGGCTGT 3300  
QY 1501 GCTGTATGAGCTTACGCGCGCGAGAGCAACAGTTAGGCTACAGACATACGAACACC 1560  
DB 3301 GCTGTATGAGCTTACGCGCGCGAGACCTTCAATGATGATGCTGCGGCTTACTTAACACA 3360  
QY 1561 CCGGACTTCCCGTGTGCGAAGACCATCTTGAATTTTGGAGGGGCTTTACGGGTCTC 1620  
DB 3361 CCGGGGTTCGCGTGTGCGAAGACCATCTGAGATTCTGGAGAGGCTTTTACAGGCTTC 3420  
QY 1621 ACCCATATGACGCCCATCTTCTATCCAGACAAAGCAGAGTGGGAAAACTTCCCTAT 1680  
DB 3421 ACCCATATGACGCCCATTTCTTGTCCAGACTAAGCAGGCGAGGACAACTTCCCTAC 3480  
QY 1681 CTGTGAGGCTACCAAGCAACGCTGTGAGCTCAAGACCCCTCCCGGTGCGGAGC 1740  
DB 3481 CTGTGAGCAATACAGGCTTACGCTGTGCGCAGAGGCTCAGGCTTCACTCATGTGAGAC 3540  
QY 1741 CAGATGTGAAGTGTGATTCGCTCAAGCCCATCTTCAATGAGGCAACATCTGTCTA 1800  
DB 3541 CAATGTGGAAGTGTCTATACGCTTAAAGCTTAAGCTGACAGGCGCAACGCGCTGCGT 3600  
QY 1801 TATAGACTGGGCTGTCCAGATGAAGTCACTTGAAGCAACGCTCAACCAATATATC 1860  
DB 3601 TATAGGCTGGGAGCGGTCAAAACAGAGGTACTACCAACACCCCATTAACCAATATATC 3660  
QY 1861 ATGATATGATGTGCGCTGACCTGTGAGGTCGTCAGAGATCCTGTGGTGTGCTGCGGCG 1920  
DB 3661 ATGATATGATGTGCGCTGACCTGTGAGGTCGTCAGAGATCCTGTGGTGTGCTGAGCGGA 3720  
QY 1921 GTTCTGTGCTTTTGGCGCGGTATTCCTTATCCAGAGCTGTGCTATAGTAGTAG 1980  
DB 3721 GTTCTTGAAGAGCTGTGCGCGGTATTCCTTATCCAGAGAGGTGTATGTGAGGAGG 3780  
QY 1981 ATGTCTTGTCTGGAAGCGCGCAATCATTCGCAAGAGAAAGTCTCTTACCGGAGTTC 2040  
DB 3781 ATCATCTTGTCTGGAAGCGCGCAATCATTCGCAAGAGAAAGTCTCTTATCCGGAGATTTC 3840

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QY      2041 GATGAATGAGAGTGC 2058
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Db      3841 GATGAGATGAGAGTGC 3858

RESULT 10
US-11-173-792-5
; Sequence 5, Application US/11/173792
; Publication No. US20060019245A1
; GENERAL INFORMATION:
; APPLICANT: Rice III, Charles
; APPLICANT: Blight, Keril
; TITLE OF INVENTION: HCV Variants
; FILE REFERENCE: 6029-4356
; CURRENT APPLICATION NUMBER: US/11/173,792
; CURRENT PILING DATE: 2005-07-01
; PRIOR APPLICATION NUMBER: US/09/576,989
; PRIOR FILING DATE: 2000-05-23
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: PatentIn Ver. 2.0
; SEQ ID NO 5
; LENGTH: 7987
; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-11-173-792-5

Query Match      67.0%; Score 1381.2; DB 8; Length 7987;
Beef Local Similarity 79.4%; Pred. No. 0;
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

QY      1  ATGGCGCTATACGCGCTATGCTCCAGCAGACAGGCGCTTTTGAGATGATTAATCAC 60
Db      1801  ATGGCGCTATATACGCGCTATGCTCCAGCAGACAGGCGCTATGCTGCTGATCATCACT 1860

QY      61  AGCTTACCGCGCGGAGCAAAAACAGGTGAGGTGAGGTTCAGATCTGCACTGCT 120
Db      1861  AGCTTACACAGCGCGGAGCAGAAACAGGTGAGGCGGAGGTCCAAAGTGTCTCCACCGCA 1920

QY      121  GCCCAGACTTTCTTGCGCAACCTTGACATTAACGGGGGTGTGTGAGCTGTACATGAGAGCC 180
Db      1921  AACAAATCTTCTTGCGCAGCTGCGTCAATGCGGTGTGTGAGCTGTATCATGATGATGC 1980

QY      181  GGAACAGAGACCATTTGCTGCTACCTAAGGCTCTGTTATCCAGATGATACCAATGTGAC 240
Db      1981  GGCTCAAAAGACCTTTGCGGCGCCCAAGGCCCAATACCAATATGATACCAATGTGAC 2040

QY      241  CAAGAATCTGTAGGTGCGCGCTCCCAAGGTCCCGCTCATTTAACACCATGCACTTGC 300
Db      2041  CAGGACCTGTGTGCGGTGCGCAGCGCGCCCGGGGCGCGTTCCTTGACACCATGCACTGC 2100

QY      301  GGCTCTGCGGACCTTTACCTGATGACAGAGGCAAGCGAGATGATTCCTGTGCGCGAGCG 360
Db      2101  GGAGCTCGGACCTTTACTTGTGATGAGAGGCAATGCGAGTCAATTCGGTGTGCGCGAGCG 2160

QY      361  GGTGATGAGGAGGAGAGCTGCTTTTCGCCCGGCTATCTTACTTTGAAAGCTCTCG 420
Db      2161  GCGGACAGAGGAGGAGAGCTTACTCTCCCAAGGCCGTCTCTACTTGAAGGCTCTTTCG 2220

QY      421  GAGAGCCCTCTGCTGTGCGCGCAGAGCAATGCCGTAGAGCATTTACAGACCGCGTATGC 480
Db      2221  GCGCGGTCCACTGCTGTGCGCGCTCGGGGCAAGCTGTGAGCATTTTCGCGCTCCGTGTGC 2280

QY      481  ACCCGTGAAGTGGCTTAAGCGCGGTGACCTTCATCCCGGTAGAGAGCTTAGAGCAACATG 540
Db      2281  ACCCGAGGGGTGCGAAGCGGTGACCTTTGTAACCGGTGAGTCTATGAAACCACTATG 2340

QY      541  AGGTCCCGCGGTGTTCTACAGCAACTCTCCCAACAGCAGTCCCGCAGAGCTACCAAGTG 600
Db      2341  CGGTCCCGCGGTCTTACAGGACAACTGTCTCCCTCGGCGGTACCGCAGAGCATTTCAAGTG 2400

QY      601  GCCCATCTGATGCTCCACCGGCAAGCGGTAAAGAGCAACAGTCCCGGCGCATACGCA 660
Db      2401  GCCCATCTTACAGCGCCCTACTGTGTAGCGGCAAGAGCATTAAGTGTCCGGCTCGTATGCA 2460
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QY      661  GCTCAGGCGTACAAAGTGTCTGTGCTCAACCCCTCCGTGTGCTGCAACATGCGCTTTGCT 720
Db      2461  GCCCAAGGTATTAAGTGTCTGTCTGAAACCCGTCTCGCGCCACCCCTAGGTTTCGGG 2520

QY      721  GCTTACATGTCCAAGGCCCATGGAATGATCTTAACATCAGGATCGGGGTGAGCAAT 780
Db      2521  GGTATATGTCTTAAGGACATGTGTATGACCTTAACATCAGAAACGGGGTAAAGACATC 2580

QY      781  ACTACTGACCGCGATACGATATTTCCACCTAACGGCAAGTTCTTGGCCGACCGCGGTCT 840
Db      2581  ACCAGGGGTGCCCATACGATCTACCTCACTAATGAGCAAGTTCTTGGCCGACCGGTGTGC 2640

QY      841  TCAGGGGTGCTTTATGACATATAATTTGTGACAGTGCCTCCAGGATGCAATCTCC 900
Db      2641  TCTGGGGGCGCTATGACATCATATATGTATGATGTGCTCACTCACTGACTGACACT 2700

QY      901  ATCTTGGGCAATTTGGCACTGTCTTTGACCAAGCAGACCGCGGGGCGAGACTGACTGTG 960
Db      2701  ATCTGGGCACTGGGACAGTCTCTGACCAAGCGGAGACGGCTGGAGCGGACTCTGCTGTG 2760

QY      961  CTCGCCACCGCTACCCCTCCGGGCTCGCTGCTGCTGCTGCTTCTTAATCATGAGAGTT 1020
Db      2761  CTCGCCACCGCTACCGCTCCGGGATCGGTCAACCGGCAATCCAAACATCGAGAGGTG 2820

QY      1021  GCTCTGTCCATACCGGAGAGATCCCTTTTATGCAAGGCTATCCCTTGAACAAAT 1080
Db      2821  GCTCTGTCCAGACTGAGAAATCCCTTTTATGCAAGGCTATCCCATCGAGACATC 2880

QY      1081  AAGGGGGGAGACATCTCATCTTTCGCCACTCAAGAAAGTGTGACGAGCTGCGCGCA 1140
Db      2881  AAGGGGGGAGGACATCTCATTTTTCGCCACTCAAGAAAGTGTGAGTGTCCCGCG 2940

QY      1141  AAATGTGTGCGGTGGGCTCAATGCCGTGCTTACTACCGGGCTTGTATGTGCTGCT 1200
Db      2941  AAGCTGTCCGCGCTCGACTCAATGTGTGTACATTTACCGGGGCTTGTATGTGCTGCT 3000

QY      1201  ATCCGACCAATGTGAGCTGTGTGCTGTGCGCACTGACCGCTCATGACCGGCTTTTACC 1260
Db      3001  ATACCAATTAAGGAGAGCTCATTTGTGTGTGACCAAGGACGCTTATTAAGCGGCTTTTACC 3060

QY      1261  GCGCATCTTGCATTTGCGTATGATCTGCAACACAGTGTGCAACCCAGACAGTGTGACG 1320
Db      3061  GCGCATTTTGCATCTGATGTGATGCAATGTGATGATGTGCAACCCAGACAGTGTGACG 3120

QY      1321  CTGACCTTACTTATCCATTGAGACATACAGCTTCCCAAGATGCTGTCTCCGTACT 1380
Db      3121  CTGACCCGACCTTCAACATTGAGACAGACCGGTGCAACAGCGGTGTACGCTTCG 3180

QY      1381  CAACGTGGGGTAAAGACTGCGAGAGGAGGACGAGGATCTACAGATTTGTGACACGGGG 1440
Db      3181  CAGCGGCAAGGACAGGACTGTGATGAGGAGAGATGAGGCAATTTACAGGTTGTGACTCAAG 3240

QY      1441  GAGCGTCTTCTTGCGATGTTGACTGTGTGTCTCTGCGAGTGTATGACGCGGGTGT 1500
Db      3241  GAAAGCGCTCTGGGAGATGTTGATCTCTCGGTTGTGCGAGTGTATGACGCGGGTGT 3300

QY      1501  GCTTGTATGAGCTTAAGCCCGCGGAGACCAAGTTAAGCTTACAGGACATACATGAACCC 1560
Db      3301  GCTTGTATGAGCTTACAGCCCGCGGAGACCTCAAGTTAAGTGTGCGGGCTTACCTTAACACA 3360

QY      1561  CCGGACTTCCCGTGTGCGCAAGACATCTTGAATTTTGGAGAGGCTCTTTACGGGTCTC 1620
Db      3361  CGAGGTTGCCGTGTGCGCAAGACATCTTGAAGTTCTGGAGAGGCTCTTTTACAGGCTTC 3420

QY      1621  ACCCATATGACGCCCATCTTCTATCCAGCAAAAGCAGATGGGGAACCTTCTCTAT 1680
Db      3421  ACCCATATAGAGGCCCATTTCTTGTCCAGCTAAAGCAGGAGGAGCAAACTTCCCTTAC 3480

QY      1681  CTGTGAGGTATCAAGACCAACGCTGTGCGCTGAGCTCAAGCCCTTCCCGTGTGGGAC 1740
Db      3481  CTGTGAGGTATCAAGGCTTACGCTGTGCGCCAGGGGCTCAGGCTTCCACTTCATCTGTGGAC 3540
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QY 1741 CAGATGTGAAATGCTTGATCCGCTCAAGCCCAACCCCTCATGGCCAAACCTCTGCTA 1800  
DB 3541 CAAATGTGAAATGCTCTCATAGGCTTAAAGCTTACAGGGCCAAAGCCCTGCTG 3600  
QY 1801 TATAGACTGGGCGCTGTCCAGATGAATGACCTTGACGACCCAGTCAACAAATATATC 1860  
DB 3601 TATAGGCTGGGACCGGTCAAAAACAGAGTTACTACACACACCCCAATACAAATATATC 3660  
QY 1861 ATGAAATGATATGCTGGCTGACCTTGAGAGTCTCAAGATGACCTGGGTGCTCTTGGCCGC 1920  
DB 3661 ATGGATCATGATGCTGGCTGACCTTGAGAGTCTCAAGATGACCTGGGTGCTCTTGGCCGC 3720  
QY 1921 GTTCTGGCTGCTTTGACGCGCGATGATGCTATGACAGAGGCTGGGTGCTATGATGATG 1980  
DB 3721 GTTCTGACGAGCTCTGCGCGCGATGATGCTATGACAGAGGCTGGGTGCTATGATGATG 3780  
QY 1981 ATGTCTGTGCTGGGAAAGCGGCAATCATACCCGACAGAGGAATGCTCTTACCGGAGTTTC 2040  
DB 3781 ATCATCTGTGCTGGGAAAGCGGCAATCATACCCGACAGAGGAATGCTCTTACCGGAGTTTC 3840  
QY 2041 GATGAAATGGAAGATGTC 2058  
DB 3841 GATGAGATGGAAGATGTC 3858

RESULT 11  
US-11-173-792-8  
; Sequence 8, Application US/11173792  
; Publication No. US2006019245A1  
; GENERAL INFORMATION:  
; APPLICANT: Rice III, Charles  
; APPLICANT: Blight, Kerl  
; TITLE OF INVENTION: HCY Variants  
; FILE REFERENCE: 6029-4356  
; CURRENT APPLICATION NUMBER: US/11/173,792  
; CURRENT FILING DATE: 2005-07-01  
; PRIOR APPLICATION NUMBER: US/09/576,989  
; PRIOR FILING DATE: 2000-05-23  
; NUMBER OF SEQ ID NOS: 21  
; SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO: 8  
; LENGTH: 7987  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
US-11-173-792-8

Query Match 67.0%; Score 1381.2; DB 8; Length 7987;  
Best Local Similarity 79.4%; Pred. No. 0;  
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

QY 1 ATGGCGCTTATCAAGGCTTATGCTCCAGACAGACAGAGGCGCTTTGGGATGCAATACAC 60  
DB 1801 ATGGCGCTTATCAAGGCTTATGCTCCAGACAGACAGAGGCGCTTTGGGATGCAATACAC 1860  
QY 61 AGCTTGAACGCGCGGGAAGAAAACAGAGTGAAGGAGGTTCAAGTGTGCACTGCT 120  
DB 1861 AGCTTGAACGCGCGGGAAGAAAACAGAGTGAAGGAGGTTCAAGTGTGCACTGCT 1920  
QY 121 GCCGAGCTTTCTTGCAACCTGCAATTAACGGGAGTGTGTTGATGCTGTACCATGAGGC 180  
DB 1921 ACACATCTTTCTTGCGGCACTGCGCTCAATGAGTGTGTTGATGCTGTATCATGAGTGC 1980  
QY 181 GGAACAGAGACATTTGCGTCACTTAAGGCTCTGTTATCAAGTGTACCAATGTGAC 240  
DB 1981 GCGTCAAGAGACCTTTGCGCGGCGCAAGGAGTGTGTTATCAACATGACATGAGC 2040  
QY 241 CAAGACTGTGAGGCGCGCTGCCAAGGAGTGTGTTATCAACATGACATGAGC 300  
DB 2041 CAAGACTGTGAGGCGCGGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCGCG 2100  
QY 301 GCGTCTGTGAGCCTTTACCTGTGTCAAGAGCAAGCGGATGTCTCTGTGCGCGAGCG 360  
DB 2101 GCGAGCTGTGAGCCTTTACCTGTGTCAAGAGCAAGCGGATGTCTCTGTGCGCGAGCG 2160

QY 361 GGTATGCAAGGAGGAGCGCTGCTTGGCGCGGCTTATCTTACTTGAAGGCTCTG 420  
DB 2161 GCGGACAGAGGAGGAGCGCTTACTCTCCCGAGCGCGCTCTCTTATGAGGAGCTCTTG 2220  
QY 421 GAGAGCGCTCTGCTGTGCGCGCAGAGATGCGGATTAATGAGAGCGCGGTATG 480  
DB 2221 GAGGCTGTCACTGTCTGCGCGCTCGGAGCGGCTGTGTGAGCATCTTTCGCGCTCGGTGTC 2280  
QY 481 ACCGCTGAGATGAGCTTAAGCGGATGATCTTATCCCGTATGAGAGCTTGAAGCAACATG 540  
DB 2281 ACCGAGAGGAGTGTGCAAGAGCGGTGATCTTGTACCGGTGAGTCAATGAAACCATATG 2340  
QY 541 AGGTCCCGGAGTGTGCAAGCAACTCTCCCGCAGAGAGTGCAGGAGTCAACAGT 600  
DB 2341 CGGTCCCGGCTTATACGAGCAACTGTCTCCCGCGGCTATCCGAGACATCTCAAGTG 2400  
QY 601 GCCCACTGTACATGCCACCGGAGCGGTAAGACCAAGTCCCGCGCATAGCA 660  
DB 2401 GCCCATATACAGCGCCCTATGATGTAGCGGAAAGACATTAAGTGCAGGCTGCTATGCA 2460  
QY 661 GCTCAGGCTTACAGAGTGTGTGCTCAACCCCTCCGTGCTGTGCAACATGAGCTTTGAT 720  
DB 2461 GCCCAAGGATATTAAGTGTGTCTGTCTGAAACCGGTCCGTGCGGCAACCTAGGTTTCGG 2520  
QY 721 GCTTACATGTCCAAAGGCCCATAGGATGATCTTATCATAGGATGAGGAGTGAACAATT 780  
DB 2521 GGTATATGTCTTAAGGCAATGTATTCGACCTTACATAGAACCGGAGTAAAGACATTC 2580  
QY 781 ACTATGCGAGCGCGATACGATATTCATACGCAAGTTCCTTGCGGACGCGGAGT 840  
DB 2581 ACCAGGAGTCCCGCATACGATATTCATACGCAAGTTCCTTGCGGACGAGTGTGTC 2640  
QY 841 TCAAGGAGTGTATGACATTAATTTGTGACAGTGTGCACTCAAGATCAACATTC 900  
DB 2641 TCTGAGGAGCGCTTATGACATTAATTTGTGAGTGTGCACTCAAGATCAACATTC 2700  
QY 901 ATCTGGGCAATTTGACATGCTCTTGAACCAAGAGAGACGCGGAGGCGGAGCTGAGCTG 960  
DB 2701 ATCTGGGATTTGAGCAAGTCTTGAACCAAGAGAGAGCGCTGAGGCGGAGCTGAGCTG 2760  
QY 961 CTGCGCACCGTACCCCTCCGCGCTCCGTCACTGTGCGCCATCTTAATCAGAGAGTT 1020  
DB 2761 CTGCGCACCGTACCCCTCCGCGATCGGTCACTGTGCGCCATCTTAATCAGAGAGTT 2820  
QY 1021 GCTGTGTCACTTACCGAGAGATCCCTTTATGCGAAGGCTATTCCTTTAAGCAATT 1080  
DB 2821 GCTGTGTCACTTACCGAGAGATCCCTTTATGCGAAGGCTATTCCTTTAAGCAATT 2880  
QY 1081 AAGGGGGAGACATCTCATCTTCCGACATCAAGAGAGAGTGTGAGCGAGCTGCGCGCA 1140  
DB 2881 AAGGGGGAGAGCACTCATTTTGTGCAATTCAGAGAGAGTGTGAGCGAGCTGCGCGG 2940  
QY 1141 AAATGTGTGCGCTTGGGCGTCAATGCGGTGCTTCAACGCGCGCTTATGATGTCTGTC 1200  
DB 2941 AAATGTGTGCGCTTGGGCGTCAATGCGGTGCTTCAACGCGCGCTTATGATGTCTGTC 3000  
QY 1201 ATCCGACAGTGTGAGGTTGTGTGTGTGCACTGAGCGCTTATGACCGGCTTTTAC 1260  
DB 3001 ATACCAATAGCGGAGAGCGTCAATGTGTGAGCAAGCGGCTTATGACCGGCTTTTAC 3060  
QY 1261 GCGGACTTGCATTTGCGGTATGACAGCAACGAGTGTGCAACCAAGTGTGCACTTACG 1320  
DB 3061 GCGGATTTGCACTGATATGACAGCAATGATGTGTGCAACCAAGTGTGCACTTACG 3120  
QY 1321 CTGACCTTACCTTACCAATGAGCAATCAAGCTTCCAGAGAGTGTCTCCGTAAT 1380  
DB 3121 CTGACCTTACCTTACCAATGAGCAATGAGCAAGCTTCCAGAGAGTGTCTCCGTAAT 3180  
QY 1381 CAAGCTCGGAGTGAAGCTGAGAGAGAGCAAGCAATCTTACAGATTTGTGCAACCGG 1440  
DB 3181 CAAGCTCGGAGTGAAGCTGAGAGAGAGCAAGCAATCTTACAGATTTGTGCACTCAGGA 3240

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QY 1441 GAGCGCTCTTGTGCAATGTTTGAAGTCTGTCTCTCTGCGAGTGATGACCGGGATTGT 1500
DB 3241 GAACGGCCCTCGGGAGATGTTTCATTCCTCTGCTTCTGTGAGTGTATACCGGGCTGT 3300
QY 1501 GCTTGGATGAGCTTACCGCCCGCCGAGACACAGTTAGGCTACGAGCATATGAAACCC 1560
DB 3301 GCTTGGATGAGCTACCGCCCGCCGAGACCTCAGTTAGGCTTACCTAAACACA 3360
QY 1561 CCGGGAATCTCCGTGTGCGCAACATCTTGAATTTTGGAGAGGCGCTTTTACGGTCTC 1620
DB 3361 CAGGAGTGTCCGTGTGCGCAACATCTGAGTTCTGGAGAGCGCTTTTACAGGCTTC 3420
QY 1621 ACCCATATGAGCGCCCATCTTCTATCCAGACAAAGAGAGTGGGAAAACTTCCCTAT 1680
DB 3421 ACCCATATGAGCGCCCATCTTCTATCCAGACATGAGAGAGAGAGACATTTCCCTAC 3480
QY 1681 CTGGTAGCGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGTCTGTGGAC 1740
DB 3481 CTGGTAGCATACAGGCTACGAGTGTGCGCAAGGCTCAAGCTCCATCGTGGAC 3540
QY 1741 CAGATGTGAAATGCTTGAATCCGTCTCAAGCCCACTCTCATGGGCAACCTCTGTCTA 1800
DB 3541 CAAATGTGAAATGCTTGAATCCGTCTCAAGCCCTCAAGCTCAAGGCGCAACCGCCCTGTG 3600
QY 1801 TATGACTGTGGCGCTGTCCAGATGAACTCACTGACCGACCCAGTCAAGATATATC 1860
DB 3601 TATGAGCTGTGGCGCTGTCCAGATGAACTCACTGACCGACCCAGTCAAGATATATC 3660
QY 1861 ATGACATGTATGTCCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTCTGTGGCGG 1920
DB 3661 ATGACATGTATGTCCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTCTGTGGCGG 3720
QY 1921 GTTCTGTGCTGCTTTGGCCCGGATGTCCTATCCACAGAGTGTGTCTATGATGATG 1980
DB 3721 GTTCTGTGCTGCTTTGGCCCGGATGTCCTATCCACAGAGTGTGTCTATGATGATG 3780
QY 1981 ATTGTCTGTCCGAAAGCCGCAATCATATCCGACAGAGGAGTCTTACCGGAGTTC 2040
DB 3781 ATTGTCTGTCCGAAAGCCGCAATCATATCCGACAGAGGAGTCTTACCGGAGTTC 3840
QY 2041 GATGAATGAAAGATGC 2058
DB 3841 GATGAATGAAAGATGC 3858

RESULT 12
US-11-173-792-13
; Sequence 13, Application US/11173792
; Publication No. US20060019245A1
; GENERAL INFORMATION:
; APPLICANT: Blight, Keri
; APPLICANT: Blight, Keri
; TITLE OF INVENTION: HCV Variants
; FILE REFERENCE: 6029-4356
; CURRENT APPLICATION NUMBER: US/11/173,792
; PRIOR FILING DATE: 2005-07-01
; PRIOR APPLICATION NUMBER: US/09/576,989
; NUMBER OF SEQ ID NOS: 21
; SOFTWARE: Patencin Ver. 2.0
; SEQ ID NO 13
; LENGTH: 7987
; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-11-173-792-13

Query Match 67.0%; Score 1381.2; DB 8; Length 7987;
Best Local Similarity 79.4%; Pred. No. 0;
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;
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QY 61 AGCTTGAACCGGCGGAGACAAAAACCAAGGTGAGGGGTGAGTTCAATGCTGCAACTGCT 120
DB 1861 AGCTTGAACCGGCGGAGACAAAAACCAAGGTGAGGGGTGAGTTCAATGCTGCAACTGCT 1920
QY 121 GCCCAGACTTTCTTGGCAACTGATTAACGGGGTGTGTGGATCTGTACCATGAGACC 180
DB 1921 ACAGATCTTTCTGTGGCAACTGATTAACGGGGTGTGTGGATCTGTACCATGAGACC 1980
QY 181 GGAACAGAGACATTTGCTGACCTAAGGCTCTGTATTCAGATGTACCAATGTGAC 240
DB 1981 GGTCTCAAGACCTTTGCGGCGCCAAAGGCGCCAAACACCAATGTACCAATGTGAC 2040
QY 241 CAAGACTGTAGGCTGTGCGCGCGTCCCAAGGTGCGCTCATTAACAATGACCTTGC 300
DB 2041 CAAGACTGTAGGCTGTGCGCGCGTCCCAAGGTGCGCTCATTAACAATGACCTTGC 2100
QY 301 GGTCTGTGAGACTTTTACCTGTGACAGAGGACGCGATGTCATTCCTGTGCGCGAGCG 360
DB 2101 GGTCTGTGAGACTTTTACCTGTGACAGAGGACGCGATGTCATTCCTGTGCGCGAGCG 2160
QY 361 GGTGATGCGAGGGGAGGCTGCTTTCGCGCGGCTTATCTTATCTTGAAGGCTCTCG 420
DB 2161 GGTGATGCGAGGGGAGGCTGCTTTCGCGCGGCTTATCTTATCTTGAAGGCTCTCG 2220
QY 421 GGAAGGCGCTGTGCTGTGCGCGCGAGGATGCGGATGATTCAGAGCGCGGATGTC 480
DB 2221 GGAAGGCGCTGTGCTGTGCGCGCGAGGATGCGGATGATTCAGAGCGCGGATGTC 2280
QY 481 ACCCGTGAAGTGTGCTGAAGGCGGTGATCTTCAATCCCGTGAAGAGTGTGAAGCAACATG 540
DB 2281 ACCCGTGAAGTGTGCTGAAGGCGGTGATCTTCAATCCCGTGAAGAGTGTGAAGCAACATG 2340
QY 541 AGGTCCCGGCTGTGCTGAAGCAATCTTCCCGCAAGAGTGTGCGGAGTGTGAAGCAAGT 600
DB 2341 AGGTCCCGGCTGTGCTGAAGCAATCTTCCCGCAAGAGTGTGCGGAGTGTGAAGCAAGT 2400
QY 601 GCCCAGCTGATGCTGCGGCGGCGGAGGATGAAGCAACAGGTCGCGGCGGATGACGA 660
DB 2401 GCCCAGCTGATGCTGCGGCGGCGGAGGATGAAGCAACAGGTCGCGGCGGATGACGA 2460
QY 661 GCTCAAGGCTCAAGAGTGTGCTGCAACCCCTGCTGTGCAACATGAGGCTTGTGT 720
DB 2461 GCTCAAGGCTCAAGAGTGTGCTGCAACCCCTGCTGTGCAACATGAGGCTTGTGT 2520
QY 721 GCTTATGATGCAAGGCGGCAATGAGTATCTTATCATCAGAGTGTGAGTGAACATTT 780
DB 2521 GCTTATGATGCAAGGCGGCAATGAGTATCTTATCATCAGAGTGTGAGTGAACATTT 2580
QY 781 ACTATGCGAGCGGATGCAAGGATTCACCTTACAGGCAAGTCTTGTGCGGAGCGGAGTGT 840
DB 2581 ACTATGCGAGCGGATGCAAGGATTCACCTTACAGGCAAGTCTTGTGCGGAGCGGAGTGT 2640
QY 841 TCAGGAGGTGTCTTATGATATATATTTGTGACAGTGTGCACTGACGAGTCAACATTC 900
DB 2641 TCAGGAGGTGTCTTATGATATATATTTGTGAGTGTGAGTGTGCACTGACGAGTCAACATTC 2700
QY 901 ATCTTGGGATTTGGGATGCTGTCTTGAACAGAGGACCGCGGGGCGGAGTGTGAGTGTG 960
DB 2701 ATCTTGGGATTTGGGATGCTGTCTTGAACAGAGGACCGCGGGGCGGAGTGTGAGTGTG 2760
QY 961 CTGCGCAACGCGTACCGGCGGCGGCTGCTGCACTGAGCGGCGGATTCATCAATGAGAGGTT 1020
DB 2761 CTGCGCAACGCGTACCGGCGGCGGCTGCTGCACTGAGCGGCGGATTCATCAATGAGAGGTT 2820
QY 1021 GCTCTGTCACTTACCGGAGAGTCTCTTTATGAGCAAGCTATTCCTTTGAGCAATT 1080
DB 2821 GCTCTGTCACTTACCGGAGAGTCTCTTTATGAGCAAGCTATTCCTTTGAGCAATT 2880
QY 1081 AAGGGGGGAGACATCTTATCTTGTGCACTCAAGAGGAGTGTGAGGAGTGTGAGGAGTGT 1140
DB 2881 AAGGGGGGAGACATCTTATCTTGTGCACTCAAGAGGAGTGTGAGGAGTGTGAGGAGTGT 2940
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Oy      1141  AAACGTGTCGGGTTGGGGCTGAATGTCGTCCTTACTACCGCGGCTTGATGTCGCTC 1200
Db      2941  AAGCTGTCGGGCTTCGGACTCAATGCTGTACATATTAACGGGGCTTGATGATCCGTC 3000
Oy      1201  ATCCGACCACTGCGTGAAGTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1260
Db      3001  ATTACCACTACCGAGAGAGTCATTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3060
Oy      1261  GGGCGACTTCGATTCGGTATGACTGCACAACGTCGTCGTCGTCGTCGTCGTCGTC 1320
Db      3061  GGGCATTTGCACTCAGTATGCACTGCACATATGTCGTCGTCGTCGTCGTCGTCGTC 3120
Oy      1321  CTTGACCTTACTTCAACCATGAGACATCAACGCTTCCCCGAGATGCTGTCCTCCG 1380
Db      3121  CTGGACCCGACCTTCAACCATGAGACGACGACGTCGTCGTCGTCGTCGTCGTCGTC 3180
Oy      1381  CAACGTCGGGGTGAAGACTGCGAGAGAGGACGAGACATCTACATTTGTCGTCGTC 1440
Db      3181  CAGCGGCGAGGACGAGACTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3240
Oy      1441  GAGCGTCCTTTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1500
Db      3241  GAAAGGCTTCGCGGACATGTCGATTCCTCGGTCGTCGTCGTCGTCGTCGTCGTCG 3300
Oy      1501  GCTTGTGTATGAGCTTACGCGCCGCGAGACCAAGTCATGAGCTACGACATACAA 1560
Db      3301  GCTTGTGTATGAGCTTACGCGCCGCGAGACCTCAGTCATGTCGTCGTCGTCGTC 3360
Oy      1561  CCGGAGCTTCCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1620
Db      3361  CCAAGGTCCTCCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3420
Oy      1621  ACCGACATAGACGCGCCACTTCTATCCGACCAAGACGAGTCGAGGAAAACCTTCC 1680
Db      3421  ACCGACATAGACGCGCCACTTCTATCCGACCTAAGACGAGGACGAGACAACTTCC 3480
Oy      1681  CTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1740
Db      3481  CTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3540
Oy      1741  CAGATGTGGAAGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1800
Db      3541  CAAATGTGGAAGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3600
Oy      1801  TATGACCTGCGCGCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1860
Db      3601  TATGACCTGCGCGCGCTTCAAAACGAGTTCATACACACGCCCATTAACCAATAC 3660
Oy      1861  ATGACATGATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1920
Db      3661  ATGACATGATGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3720
Oy      1921  GTTCTGCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1980
Db      3721  GTTCTGCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 3780
Oy      1981  ATTGCTCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 2040
Db      3781  ATCATCTTGTCTCGGAAAGCCGACCTATTCCTCCAGACGAGGAAATCTTTACCG 3840
Oy      2041  GATGAAATGGAAGAGTCG 2058
Db      3841  GATGAGATGGAAGAGTCG 3858

RESULT 13
US-10-509-921-6
; Sequence 6, Application US/10509921
; Publication No. US20050250093A1
; GENERAL INFORMATION:
;   APPLICANT: SmithKline Beecham Corporation
;   TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons
;   FILE REFERENCE: P51335

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[illegible]

Db 2581 ACCACGGGAGCCCCCATCAGACTCACTCACTATGGCAAGTTCTTGCGACGGTGGTGC 2640  
Qy 841 TCAGGGGGTGTCTTATGACATATATTTGTGACAGTGTGCATTCACCGATGCAATCC 900  
Db 2641 TCTGGGGGGCGCTATGACATATATATGTGTGAGTGTGCATCTCACTGACGCACT 2700  
Qy 901 ATCTTGGGCAATGGCACTGTCTTGGACCAAGAGAGACGGGGGGGAGACTGACTGTG 960  
Db 2701 ATCTTGGGCAATGGCACTGTCTTGGACCAAGAGAGACGGGGGGGAGACTGTG 2760  
Qy 961 CTGCGCACCGCTTACCTCTCGGGGCTCTCGCTGCTGTGTGCTTCCCATCTTAACGAGAGTT 1020  
Db 2761 CTGCGCACCGCTTACCTCTCGGGGCTCTCGCTGCTGTGTGCTTCCCATCTTAACGAGAGTT 2820  
Qy 1021 GCTCTGTCTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTTTGAACATTT 1080  
Db 2821 GCTCTGTCTCACTACCGGAGAGATCCCTTTTATGGCAAGGCTATTCCTTTGAACATTT 2880  
Qy 1081 AAGGGGGGAGACATCTCATCTTCTGCGCACTCAAAAGAAAGTGGCAGCGCTCGCGCA 1140  
Db 2881 AAGGGGGGAGACATCTCATCTTCTGCGCACTCAAAAGAAAGTGGCAGCGCTCGCGCG 2940  
Qy 1141 AAACGTGTGCGCTTGGGCGCTCAATGCGCTTACTTACCGCGCTTGTGTGCTGCTG 1200  
Db 2941 AAGCTGTGCGGCGCTGCGACTCATGTGTGATTTACCGGGGCTTGTATCTGCTG 3000  
Qy 1201 ATCCCGACAGTGTGACCTTGTCTGTGTGGCACTGACGCGCTTATGACCGGCTTTTAC 1260  
Db 3001 ATACCAACTGAGGAGACGTCAATGTGTGACAGGAGCTCTAATGACGGGCTTTTAC 3060  
Qy 1261 GGCGCACTTGCATTCGGTGTATGACTGCAACAGTGTGTCAACCGACAGTCTGACTGAC 1320  
Db 3061 GGCGCACTTGCATTCGGTGTATGACTGCAACAGTGTGTCAACCGACAGTCTGACTGAC 3120  
Qy 1321 CTGACCCCTTACCTTACCATGAGACATCACGCTTCCCGAGATGTGTCTCCGCTACT 1380  
Db 3121 CTGACCCCGACTTACCATGAGAGACAGACCGTGCACAAGACGGGCTGTCAAGCTG 3180  
Qy 1381 CAACGTCCGGGTGAGACTGGGCAAGAGGAAACGAGGATTTAAGATTTGTGGACCGGG 1440  
Db 3181 CAGCGGCGAGGAGAGACTGGTGGGAGAGATGGGATTTAAGATTTGTGGACCGGG 3240  
Qy 1441 GAGCGTCTCTTGGGCACTGTTGACTGTGTCTCTGCGAGTGTATGACCGGGTGT 1500  
Db 3241 GAAACGGCTCTGGGCACTGTTGACTGTGTCTCTGCGAGTGTATGACCGGGTGT 3300  
Qy 1501 GCTTGTATGAGCTTACCGCCCGGACGACACAGTTAGGCTACGAGCATATGAACAC 1560  
Db 3301 GCTTGTATGAGCTTACCGCCCGGACGACCTCAGTTAGGCTACGAGCTTAAACACA 3360  
Qy 1561 CCGGCACTTCCCGTGTGCGCAAGACCTTGAATTTTGGGAGGGGCTTTTACGGGTCT 1620  
Db 3361 CCGGCACTTCCCGTGTGCGCAAGACCTTGAATTTTGGGAGGGGCTTTTACGGGTCT 3420  
Qy 1621 ACCCAATGAGCGCCCACTTCTATCCAGACAAAGAGAGTGGGAAAACCTTCCCTAT 1680  
Db 3421 ACCCAATGAGCGCCCACTTCTATCCAGACAAAGAGAGTGGGAAAACCTTCCCTAT 3480  
Qy 1681 CTGTGAGCTACCAAGCAACCGTGTGCGTGAAGCTCAAGCCCTTCCCGCTGTGGAG 1740  
Db 3481 CTGTGAGCTACCAAGCAACCGTGTGCGTGAAGCTCAAGCCCTTCCCGCTGTGGAG 3540  
Qy 1741 CAGATGTGAAATGTCTGATTCCTGTCAAGGCCCACTTCATGAGGGCCACACTCTGTCT 1800  
Db 3541 CAAATGTGAAATGTCTGATTCCTGTCAAGGCCCACTTCATGAGGGCCACACTCTGTCT 3600  
Qy 1801 TATTAAGCTGGGCGCTGTCCAGATGAATGACCCCTTACCGCACAGTCTCAAGTATATC 1860  
Db 3601 TATTAAGCTGGGCGCTGTCCAGATGAATGACCCCTTACCGCACAGTCTCAAGTATATC 3660  
Qy 1861 ATGAACATGATGTGCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTGTCTGTGGCGG 1920  
Db 3661 ATGAACATGATGTGCGCTGACCTGAGAGTGTCTACAGAGTACTGGGTGTCTGTGGCGG 3720

Qy 1921 GTTCTGCTGTGTTGGCGCGCTATTTGCTTATCCAGGCTGCGTGTATAGTAGTAG 1980  
Db 3721 GTTCTGCTGTGTTGGCGCGCTATTTGCTTATCCAGGCTGCGTGTATAGTAGTAG 3780  
Qy 1981 ATTGTCTTGTCCGGAAGACCGGCAATCATATCCGACAGGGAAGTCTTACCGGAGTT 2040  
Db 3781 ATCATCTTGTCCGGAAGACCGGCAATCATATCCGACAGGGAAGTCTTACCGGAGTT 3840  
Qy 2041 GATGAATGGAAGAGTGC 2058  
Db 3841 GATGAGATGAAGAGTGC 3858

RESULT 14  
US-10-509-921-13  
; Sequence 13, Application US/10509921  
; Publication No. US2005025093A1  
; GENERAL INFORMATION:  
; APPLICANT: SmithKline Beecham Corporation  
; TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons  
; FILE REFERENCE: P51335  
; CURRENT APPLICATION NUMBER: US/10/509,921  
; PRIOR FILING DATE: 2004-10-01  
; PRIOR APPLICATION NUMBER: 60/369,685  
; NUMBER OF SEQ ID NOS: 54  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 13  
; LENGTH: 7989  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: The polynucleotide sequence encodes sequences from  
US-10-509-921-13

Query Match 67.0%; Score 1381.2; DB 7; Length 7989;  
Best Local Similarity 79.4%; Pred. No. 0;  
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

Qy 1 ATGGCGCTTATCACGGCTTATGCCCCAGACAGAAAGGGGCTTTTGGATGATATCAC 60  
Db 1801 ATGGCGCTTATTACGGCTTATGCCCCAGACAGCGAGGCTTATGCTGATCACT 1860  
Qy 61 AGCTTGACCGGCGCGGAGCAAAAACAGGTGAGGTGAGTTCAATGTGTCACTGCT 120  
Db 1861 AGCTTGACCGGCGCGGAGCAAAAACAGGTGAGGTGAGTTCAATGTGTGTCCACCGCA 1920  
Qy 121 GCCGCACTTCTTGGCAACCTGATTAACGGGGTGTGTGGACTGTCTACCATGAGAC 180  
Db 1921 ACACATTTTCTGCGCACTGTGCTCAATGAGCTGTGTGTGACTGTCTATATGTGTC 1980  
Qy 181 GGAAACAGAACCATTTGCTCACTCAATGAGGTCTGTATTCAGATGTACCAATGTGAC 240  
Db 1981 GGCTCAAGAACCTTGGCGGCCCAAAAGGGCCCAATCAACCAATGATGACCAATGTGAC 2040  
Qy 241 CAAGACTCTGTAGGTGTGCGCGCTCCCAAGTGTGCGCTATTAACACATGACCTGC 300  
Db 2041 CAGGACTCTGTGCGGTGCAAGCGCGCCCGGGGGGCTTCTTGAACACAGTCACTGC 2100  
Qy 301 GGCTCTGGAACCTTATCTGGTCAAGAGGACGCGATGTCAATTCATGAGGCTCTGC 360  
Db 2101 GGCACTGTGACCTTATCTGTGTCAAGAGGATGCGGATGTATTCGGGTGCGCGGCG 2160  
Qy 361 GGTGATGCGAGGGGAGCGCTGTTCGCGCGGCTATCTCTTACTTGAAGGCTCTGC 420  
Db 2161 GGCGACAGAGGGGAGCGCTACTCTCCCGAGGCGCGTCTCTTACTTGAAGGCTCTGC 2220  
Qy 421 GGAGGCGCTCTGTGTGCGCGGAGAGATGCGGTGAGGATTTCAAGAGCGCGGTATGC 480  
Db 2221 GGCGGTGTCACTGTGCGCGCTGTGGGAGACGCTGTGGGATCTTTCGGGCTCCGCTGTC 2280



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Qy 481 ACCGCTGAGTGTCTAAGAGCGGTGAGCTTCAATCCCGTAGAGAGCTTAGACAACACATG 540
Db 2281 ACCGAGGGGTTGGCAAGGCGGTGAGCTTGTATACCGCTGAGTCTATGAGAAACCTATATG 2340
Qy 541 AGGTCCCGGTGTTCTAGACAACATCTCTCCCAACGAGAGTGGCCCAAGCTTACCAATG 600
Db 2341 CGGTCCCGGTCTTACAGGACAACTGATCCCTCCGCGGTATCCGACATCTTCCAGGTG 2400
Qy 601 GCCCACTGATGCTCCACCGGAGCGGTAGAGACCAAGSTCCCGCGCATATCCCA 660
Db 2401 GCCCATCTACAGCGCCCTACTAGTGGAGCAAGACCTTAAGTCCCGCTGCTATCA 2460
Qy 661 GCTCAGGCTACAAAGTCTGGTGTCTCAACCCCTCCGTGCTGCAACAATGGCTTTGAT 720
Db 2461 GCCCAAGGATATAGGTGCTTGTCTGAAACCGCTCCGTGCGCCACCCCTAGGTTCCGG 2520
Qy 721 GCTTACATGTCCAAAGGCCAATGGATTGATCTTAAATCAAGATCTGGGGTGAAGCAATT 780
Db 2521 GCGTATATGTCTAAGGCAATGATTCGACCTTAACTACAGAACCGGGGTAAAGACATC 2580
Qy 781 ACTATGCGAGCGCCATCAAGTATTCACCTACGCGCAAGTCTCTGGCGAGCGGGGTGT 840
Db 2581 ACCAAGGGTGGCCCATACGATCTCACTACCTAAGCAAGTTCTTGGCGAGCTGTGTC 2640
Qy 841 TCAGGGGGTGTATGATGATATTAATTTGTGAAGAGTGCACCTCCAGGATGCAATCC 900
Db 2641 TCTGGGGGGCTTATGATGATCATTAATTAATGATGATGATGATGATGATGATGATGATG 2700
Qy 901 ATCTTGGGCAATTTGGCACTGTCTTTGACCAAGAGAGACCGCGGGGCGAGACTGTC 960
Db 2701 ATCTTGGGCAATTTGGCACTGTCTTTGACCAAGAGAGACCGCGGGGCGAGACTGTC 960
Qy 961 CTTCGCAACCGCTAACCCTTCGCGGCTCCGCTCACTGTGCTCCCATCTTAATCAAGAGAT 1020
Db 2761 CTTCGCAACCGCTAACCCTTCGCGGCTCCGCTCACTGTGCTCCCATCTTAATCAAGAGAT 1020
Qy 1021 GCTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTGAACAAT 1080
Db 2821 GCTCTGTCACTACCGGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTGAACAAT 1080
Qy 1081 AAGGGGGGAGACATCTCATCTTCTGCACTCAAGAAAGAAAGTGGAGAGCTGCGCA 1140
Db 2881 AAGGGGGGAGACATCTCATCTTCTGCACTCAAGAAAGAAAGTGGAGAGCTGCGCA 1140
Qy 1141 AAACGTGCTGCGCTTGGGCTCAATGCGGTGCTTCACTCCGCGCTTGAATGTCGTC 1200
Db 2941 AAACGTGCTGCGCTTGGGCTCAATGCGGTGCTTCACTCCGCGCTTGAATGTCGTC 1200
Qy 1201 ATCCGACAGTGTGAGAGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1260
Db 3001 ATCCGACAGTGTGAGAGTGTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTC 1260
Qy 1261 GAGCGATTCGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1320
Db 3061 GAGCGATTCGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1320
Qy 1321 GAGCGATTCGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
Db 3121 GAGCGATTCGATTCGATGATGATGATGATGATGATGATGATGATGATGATGATGATGAT 1380
Qy 1381 CAAGCTGCGGGGTGAGAGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1440
Db 3181 CAAGCTGCGGGGTGAGAGTGGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1440
Qy 1441 GAGCGTCTTCTGCGATGTTGATCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1500
Db 3241 GAGCGTCTTCTGCGATGTTGATCTGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCGTCG 1500
Qy 1501 GCTTGTATGAGCTTAAGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
Db 3301 GCTTGTATGAGCTTAAGCGCGCGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1560
Qy 1561 CCGGAGCTTCCGCTGTGCAAGACATCTGAATTTTGGAGAGGGGCTTTTACGGGCTTC 1620

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Db 3361 CGAGGTTGCCGCTGTCAGAGACATCTGAGGTTCTGGAGAGGCTCTTACAGGCTTC 3420
Qy 1621 ACCCATATGAGCGCCCATCTTCTATCCAGACAAAGAGAGTGGGAAAACTTCCCTAT 1680
Db 3421 ACCCATATGAGCGCCCATCTTCTTGTCCAGACTAAGCAGGAGAGAGAACTTCCCTAT 3480
Qy 1681 CTGGTATGAGCTTAAGCGCGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
Db 3481 CTGGTATGAGCTTAAGCGCGCTGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAGAG 1740
Qy 1741 CAGATGTGAGAGTGTGATCCGTCTCAAGCCCACTTCAATGAGGCAACAACCTTGTCTA 1800
Db 3541 CAATGTGAGAGTGTCTATACGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCTTAAGCT 3600
Qy 1801 TATGAGCTGGGCGCTGTCCAGATTAAGTCACTCAAGCAGCAGCAGCAGCAGCAGCAGC 1860
Db 3601 TATGAGCTGGGCGCTGTCCAGATTAAGTCACTCAAGCAGCAGCAGCAGCAGCAGCAGC 1860
Qy 1861 ATGACATGATGTGGCTGACCTGGAGGTCGTCAGAGATCCTGGGCTGCTGGGCGAGC 1920
Db 3661 ATGACATGATGTGGCTGACCTGGAGGTCGTCAGAGATCCTGGGCTGCTGGGCGAGC 1920
Qy 1921 GTTCTGCTGCTTGGCGCGATATTCCTATTCACAGGCTGCTGCTGATAGTATGAG 1980
Db 3721 GTTCTGAGAGCTTGGCGCGATATTCCTATTCACAGGCTGCTGCTGATAGTATGAG 1980
Qy 1981 ATGTCTTGTCCGAAAGCCCGCAATCATPACCCAGAGAGAGTCTTCAACGGAGTTC 2040
Db 3781 ATGTCTTGTCCGAAAGCCCGCAATCATPACCCAGAGAGAGTCTTCAACGGAGTTC 2040
Qy 2041 GATGAATGAGAGAGTGC 2058
Db 3841 GATGAATGAGAGAGTGC 3858

RESULT 15
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; Sequence 14, Application US/10509921
; Publication No. US20050250093A1
; GENERAL INFORMATION:
; APPLICANT: SmithKline Beecham Corporation
; TITLE OF INVENTION: Hepatitis C Virus Sub-Genomic Replicons
; FILE REFERENCE: P51335
; CURRENT APPLICATION NUMBER: US/10/509,921
; PRIOR FILING DATE: 2004-10-01
; PRIOR APPLICATION NUMBER: 60/369,685
; NUMBER OF SEQ ID NOS: 54
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 14
; LENGTH: 7989
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: The polynucleotide sequence encodes sequences from
; US-10-509-921-14

Query Match 67.0%; Score 1381.2; DB 7; Length 7989;
Best Local Similarity 79.4%; Pred. No. 0;
Matches 1635; Conservative 0; Mismatches 423; Indels 0; Gaps 0;

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 Db 2161 GGCGAGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2220  
 Qy 421 GGAGGCGCTGTGCTGCGCGGACGAGGACATGCGGTGAGGATATTCAGAGCGCGGTATGC 480  
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 Db 2401 GCCCACTGATGCTCCCAACGAGTGCAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 2460  
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Search completed: February 7, 2006, 23:33:17  
 Job time : 403 secs

Pending Nucleic Acid and Pending Amino Acid database searches generate two sets of results each. The Pending databases have been split into two parts to reduce the amount of time required for their daily updates. This results in more machine time being available for processing searches. Searches run against the Nucleic Acid Pending database produce two sets of results, with the extensions .rapm and .rapn. Searches run against the Amino Acid Pending database produce two sets of results, with the extensions .rapm and .rapn.

**Because they contain data that is confidential, the results of Pending database searches should not be left in the case.**

**BOOK**

GenCore version 5.1.7  
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OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:23:15 ; Search time 11527 Seconds

(without alignments)  
9886.002 Million cell updates/sec

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Perfect score: 2061

Sequence: 1 atggcgctacacagcgcta.....atgaatggaagagcgctga 2061

Scoring table: IDENTITY\_NUC

Gapop 10.0, Gapext 1.0

Searched: 79147668 seqs, 27645789525 residues 158295336

Total number of hits satisfying chosen parameters:

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Result No.	Score	Query Match	Length	ID	Description
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2	2061	100.0	2061	US-10-817-591-16	Sequence 16, Appli
3	2061	100.0	2061	US-11-043-808-1	Sequence 1, Appli
4	2061	100.0	2061	US-11-249-893-1	Sequence 1, Appli
5	2061	100.0	2061	US-60-685-014-1	Sequence 1, Appli
6	2061	100.0	2061	US-60-685-015-163	Sequence 163, App
7	1787	86.7	6299	US-09-721-479B-6	Sequence 6, Appli
8	1787	86.7	6299	US-11-195-009-6	Sequence 6, Appli
9	1786	86.7	7310	US-08-403-5908-74	Sequence 74, Appli
10	1786	86.7	7310	US-08-444-112-74	Sequence 74, Appli
11	1786	86.7	9229	US-08-436-966-1	Sequence 1, Appli
12	1786	86.7	9379	US-07-722-489-497	Sequence 497, App
13	1786	86.7	9401	PCT-US03-19834-1	Sequence 1, Appli
14	1786	86.7	9401	US-10-445-724-1	Sequence 1, Appli
15	1784.4	86.6	6785	US-08-403-5908-65	Sequence 65, Appli
16	1784.4	86.6	6785	US-08-444-112-65	Sequence 65, Appli
17	1784.4	86.6	8316	US-08-403-5908-88	Sequence 88, Appli
18	1784.4	86.6	8316	US-08-444-112-88	Sequence 88, Appli
19	1784.4	86.6	8987	US-08-403-5908-137	Sequence 137, App
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21	1784.4	86.6	9185	US-08-403-5908-122	Sequence 122, App
22	1784.4	86.6	9185	US-08-403-5908-123	Sequence 123, App
23	1784.4	86.6	9185	US-08-444-112-122	Sequence 122, App

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

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25 1784.4 86.6 9379 14 US-08-403-5908-176 Sequence 176, App
26 1784.4 86.6 9379 14 US-08-444-112-176 Sequence 176, App
27 1781.2 86.4 2058 1 PCT-US03-28071-1 Sequence 1, Appl1
28 1781.2 86.4 2058 54 US-10-643-853-2 Sequence 2, Appl1
29 1781.2 86.4 2058 54 US-10-658-782-1 Sequence 1, Appl1
30 1781.2 86.4 5360 14 US-08-403-5908-53 Sequence 53, Appl1
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32 1781 86.4 2061 3 PCT-US05-30325-1 Sequence 1, Appl1
33 1781 86.4 2061 72 US-11-213-326-1 Sequence 1, Appl1
34 1779.6 86.3 2058 3 PCT-US05-30324-5 Sequence 5, Appl1
35 1779.6 86.3 2058 62 US-10-899-715-1 Sequence 1, Appl1
36 1774.8 86.1 12980 22 US-09-238-076-5 Sequence 5, Appl1
37 1774.8 86.1 12980 35 US-09-917-563-5 Sequence 5, Appl1
38 1774.8 86.1 12980 38 US-09-963-433-5 Sequence 5, Appl1
39 1774.8 86.1 12980 39 US-09-995-937-5 Sequence 5, Appl1
40 1773.2 86.0 9646 22 US-09-238-076-1 Sequence 1, Appl1
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43 1773.2 86.0 9646 39 US-09-995-937-1 Sequence 1, Appl1
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45 1765.2 85.6 9599 1 PCT-US03-21002-13 Sequence 13, Appl1
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## ALIGNMENTS

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US-10-307-047-1
/ Sequence 1, Application US/10307047
/ GENERAL INFORMATION:
/ APLICANT: Matti Sallberg
/ TITLE OF INVENTION: A HEPATITIS C VIRUS NON-STRUCTURAL
/ TITLE OF INVENTION: NS3/4A FUSION GENE
/ FILE REFERENCE: TRIPEP_028CPI
/ CURRENT APPLICATION NUMBER: US/10/307,047
/ PRIOR FILING DATE: 2002-11-26
/ PRIOR APPLICATION NUMBER: 60/225,767
/ PRIOR FILING DATE: 2000-08-17
/ PRIOR APPLICATION NUMBER: 60/229,175
/ PRIOR FILING DATE: 2000-08-29
/ PRIOR APPLICATION NUMBER: 09/705,547
/ PRIOR FILING DATE: 2000-11-03
/ PRIOR APPLICATION NUMBER: 09/930591
/ PRIOR FILING DATE: 2001-08-15
/ NUMBER OF SEQ ID NOS: 38
/ SOFTWARE: FaSTSeq for Windows Version 4.0
/ SEQ ID NO 1
/ LENGTH: 2061
/ TYPE: DNA
/ ORGANISM: Artificial Sequence
/ FEATURE:
/ OTHER INFORMATION: Hepatitis C virus NS3/4A coding region
US-10-307-047-1
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Best Local Similarity 100.0%; Pred. No. 0;
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;
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 1741 CAGATGGAAGTGTGATCGCTGCTCAAGCCCATCTTCATGAGGCAACCTCTGCTA 1800  
 1801 TATAGACTGGGCGCTGTCCAGATGAAGTCACTTGAAGCCAGTCACTGATATC 1860  
 1801 TATAGACTGGGCGCTGTCCAGATGAAGTCACTTGAAGCCAGTCACTGATATC 1860  
 1861 ATGATATGATGTCGGCTGACCTGAGAGGCTGACAGAGTACTGGGTGCTCGTGGCGGC 1920  
 1861 ATGATATGATGTCGGCTGACCTGAGAGGCTGACAGAGTACTGGGTGCTCGTGGCGGC 1920  
 1921 GTTCTGCTGCTTGTGGCGCGCTATGCTATCCACAGGCTGGGTCTATAGTATAG 1980  
 1921 GTTCTGCTGCTTGTGGCGCGCTATGCTATCCACAGGCTGGGTCTATAGTATAG 1980  
 1981 ATTGCTGTGTCGGAAAGCCGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTTC 2040  
 1981 ATTGCTGTGTCGGAAAGCCGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTTC 2040  
 2041 GATGAATGGAAGTGTCTGA 2061  
 2041 GATGAATGGAAGTGTCTGA 2061

RESULT 2  
 US-10-817-591-16  
 ; Sequence 16, Application US/10817591  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Matti Salilberg  
 ; APPLICANT: Catharina Hulcyren  
 ; TITLE OF INVENTION: VACCINES CONTAINING RIBAVIRIN AND  
 ; TITLE OF INVENTION: METHODS OF USE THEREOF  
 ; FILE REFERENCE: TRIPEP.23AUS2C1  
 ; CURRENT APPLICATION NUMBER: US/10/817,591  
 ; PRIOR FILING DATE: 2004-04-02  
 ; PRIOR FILING DATE: 2003-11-20  
 ; PRIOR FILING DATE: 2002-03-22  
 ; PRIOR FILING DATE: 2002-03-22  
 ; PRIOR APPLICATION NUMBER: 09/929,955  
 ; PRIOR APPLICATION NUMBER: 09/929,955  
 ; PRIOR APPLICATION NUMBER: 09/705,547  
 ; PRIOR FILING DATE: 2000-11-03

100.0% Score 2061; DB 62; Length 2061;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;  
 Query Match  
 1 ATGGCGCTTATCAGCGCTATGCTCCAGAGACCAAGGGCTTTTGGATGATTAATCACC 60  
 1 ATGGCGCTTATCAGCGCTATGCTCCAGAGACCAAGGGCTTTTGGATGATTAATCACC 60  
 61 AGCTTACCGGCGGGGACAAAAACAGGTGAGGCTGAGTTCAAGTGTCTCACTGCT 120  
 61 AGCTTACCGGCGGGGACAAAAACAGGTGAGGCTGAGTTCAAGTGTCTCACTGCT 120  
 121 GCCCAGACTTTCTTGGCAACCTGCAATTAAACGGGGTGTGTGGAATGCTACATGAGGCC 180  
 121 GCCCAGACTTTCTTGGCAACCTGCAATTAAACGGGGTGTGTGGAATGCTACATGAGGCC 180  
 181 GGAACAGAGACATTGCTGCTCACTTAAGGCTCTGTTATCAGATGTACACCAATGTGAC 240  
 181 GGAACAGAGACATTGCTGCTCACTTAAGGCTCTGTTATCAGATGTACACCAATGTGAC 240  
 241 CAAGAAGCTGTAGAGTGGCCGCTCCCAAGGTGCTCCCAATTAACACCATGACCTTGC 300  
 241 CAAGAAGCTGTAGAGTGGCCGCTCCCAAGGTGCTCCCAATTAACACCATGACCTTGC 300  
 301 GGCTCTCGGACCTTTACTGCTGCTCAAGAGCAGCGGCAATGCTATCTGCTGGCGGAGCG 360  
 301 GGCTCTCGGACCTTTACTGCTGCTCAAGAGCAGCGGCAATGCTATCTGCTGGCGGAGCG 360  
 361 GGTGATGAGGAGGAGAGCTGCTTTCGCGCGGCTATCTCTTACTTGAAGGCTCTCG 420  
 361 GGTGATGAGGAGGAGAGCTGCTTTCGCGCGGCTATCTCTTACTTGAAGGCTCTCG 420  
 421 GGAGGCGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480  
 421 GGAGGCGCTGTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 480  
 481 ACCCGTGAAGTGGCTTAAGCGGCTGATTCATCCCGTGAAGAGCTTGAAGCAACCATG 540  
 481 ACCCGTGAAGTGGCTTAAGCGGCTGATTCATCCCGTGAAGAGCTTGAAGCAACCATG 540  
 541 AGCTCCCGGCTTCTCAAGCAACTCTCTCCACAGAGTGGCTCCCAAGAGTCAACCAAGT 600  
 541 AGCTCCCGGCTTCTCAAGCAACTCTCTCCACAGAGTGGCTCCCAAGAGTCAACCAAGT 600  
 601 GCCCATCTGATGCTCCCAAGCGGCTGATTCATCCCGTGAAGAGCTTGAAGCAACCATG 660  
 601 GCCCATCTGATGCTCCCAAGCGGCTGATTCATCCCGTGAAGAGCTTGAAGCAACCATG 660  
 661 GCTCAGGCTGCAAGAGTGTGTGCTCAACCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720  
 661 GCTCAGGCTGCAAGAGTGTGTGCTCAACCTCTGCTGCTGCTGCTGCTGCTGCTGCTGCT 720  
 721 GCTTACATGCTCAAGAGGCTGATGCTTCAATCAATCAAGAGTGGGCTGAGCAAT 780  
 721 GCTTACATGCTCAAGAGGCTGATGCTTCAATCAATCAAGAGTGGGCTGAGCAAT 780  
 781 ACTTACGAGCGCGGATCAAGTATTCATCAAGGCAAGTCTTGGCGAGCGGCGGT 840  
 781 ACTTACGAGCGCGGATCAAGTATTCATCAAGGCAAGTCTTGGCGAGCGGCGGT 840



QY 361 GATGATGACAGGGGAGCCCTGCTTCCGCCCGCCCTATCTCTTACTTGAAGAGCTCTCG 420  
 DB 361 GGTGATGAGAGGGGAGCCCTGCTTTCGCCCGCCCTATCTCTTACTTGAAGAGCTCTCG 420  
 QY 421 GAGAGCCCTCTGCTGTGCCCCGACAGACATGCTGAGGCAATTCAGAGCCCGGTATGC 480  
 DB 421 GAGAGCCCTCTGCTGTGCCCCGACAGACATGCTGAGGCAATTCAGAGCCCGGTATGC 480  
 QY 481 ACCCGTGAAGTGGCTTAAGGCGGTGACCTTCACTCCCGTGAAGAGCTTGAAGCAACATG 540  
 DB 481 ACCCGTGAAGTGGCTTAAGGCGGTGACCTTCACTCCCGTGAAGAGCTTGAAGCAACATG 540  
 QY 541 AGGTCCCGGTGTTCTCAGACAACACTCTTCCCAAGAGAGTCCCGAGAGTACCAAGT 600  
 DB 541 AGGTCCCGGTGTTCTCAGACAACACTCTTCCCAAGAGAGTCCCGAGAGTACCAAGT 600  
 QY 601 GCCCACTTGATGCTCCCAACGCGAGCGGTAAAGACCAAGGTCCCGGCTATACGCA 660  
 DB 601 GCCCACTTGATGCTCCCAACGCGAGCGGTAAAGACCAAGGTCCCGGCTATACGCA 660  
 QY 661 GCTCAGGGCTAAGAGTGTGCTGCTCAACCCCTCCGTGCTGCAACATGCGGCTTTGCT 720  
 DB 661 GCTCAGGGCTAAGAGTGTGCTGCTCAACCCCTCCGTGCTGCAACATGCGGCTTTGCT 720  
 QY 721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAACTAGAGATCGGGGTGAGCAAT 780  
 DB 721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAACTAGAGATCGGGGTGAGCAAT 780  
 QY 781 ACTACTGGAGCCGATCAAGTATTCACCTTACGCGCAAGTTCCTTCCGAGCGCGGTGT 840  
 DB 781 ACTACTGGAGCCGATCAAGTATTCACCTTACGCGCAAGTTCCTTCCGAGCGCGGTGT 840  
 QY 841 TCAGAGGGGTGCTTATGACATTAATTTGTGACAGTGTCACTCCAGAGATGCCAATTC 900  
 DB 841 TCAGAGGGGTGCTTATGACATTAATTTGTGACAGTGTCACTCCAGAGATGCCAATTC 900  
 QY 901 ATCTTGGGCAATGGCACTGTCTTTCGACAAAGAGAGACCGCGGGGAGAGCTGACTGTG 960  
 DB 901 ATCTTGGGCAATGGCACTGTCTTTCGACAAAGAGAGACCGCGGGGAGAGCTGACTGTG 960  
 QY 961 CTGCGCACCGCTAACCCCTCCGGGCTCCGCTCACTGTGCCCCATCTTAACTGAGAGGTT 1020  
 DB 961 CTGCGCACCGCTAACCCCTCCGGGCTCCGCTCACTGTGCCCCATCTTAACTGAGAGGTT 1020  
 QY 1021 GCTCTGTCACTACCGGAGAGATCCCTTTTATGCAAGGCTTATCCCTTGAAGCAAT 1080  
 DB 1021 GCTCTGTCACTACCGGAGAGATCCCTTTTATGCAAGGCTTATCCCTTGAAGCAAT 1080  
 QY 1081 AAGGGGGGAGACATCTCATCTTCTGCGCATCAAGAAAGAGTGGGAGAGGCTCGCGCA 1140  
 DB 1081 AAGGGGGGAGACATCTCATCTTCTGCGCATCAAGAAAGAGTGGGAGAGGCTCGCGCA 1140  
 QY 1141 AAACCTGTGCGCTGTGGCGCTCAATGCGGCTTACTACCGGCGCTTGTGCTCCGTC 1200  
 DB 1141 AAACCTGTGCGCTGTGGCGCTCAATGCGGCTTACTACCGGCGCTTGTGCTCCGTC 1200  
 QY 1201 ATCCGACCACTGTGAGCTTGTGCTGCTGCGCACTGACGCTTCAACCGGCTTTAC 1260  
 DB 1201 ATCCGACCACTGTGAGCTTGTGCTGCTGCGCACTGACGCTTCAACCGGCTTTAC 1260  
 QY 1261 GGGCGCTTCGATTGGGTGATAGCTGCAACAGTGTGACCCGACAGAGTGCATTTACG 1320  
 DB 1261 GGGCGCTTCGATTGGGTGATAGCTGCAACAGTGTGACCCGACAGAGTGCATTTACG 1320  
 QY 1321 CTGGAACCTTACCTTACATTTAGACAAATCAGGCTTCCCAAGAGTGTCTCCGTA 1380  
 DB 1321 CTGGAACCTTACCTTACATTTAGACAAATCAGGCTTCCCAAGAGTGTCTCCGTA 1380  
 QY 1381 CAACGTCGGGGTGAAGCTGGGAGAGGAAAGCAAGGATTTAAGATTTGTGCAACCGGG 1440  
 DB 1381 CAACGTCGGGGTGAAGCTGGGAGAGGAAAGCAAGGATTTAAGATTTGTGCAACCGGG 1440  
 QY 1441 GAGCGCTCTTGGGATGTTGATCTGTGCTCTGTGAGTGTGATGACCGGGTGT 1500

DB 1441 GAGCGCTCTTGGGATGTTGATCTGTGCTCTGAGAGTGTATAGACGGGTTGT 1500  
 QY 1501 GTTGTATGAGCTTACGCCCCCGACAGACCAAGTATGAGCTACAGATCAATGAAACAC 1560  
 DB 1501 GTTGTATGAGCTTACGCCCCCGACAGACCAAGTATGAGCTACAGATCAATGAAACAC 1560  
 QY 1561 CCGGAGCTTCCGATGCGAAGACCATCTTGAATTTTGGAGAGGGGTCTTTACGGGTCTC 1620  
 DB 1561 CCGGAGCTTCCGATGCGAAGACCATCTTGAATTTTGGAGAGGGGTCTTTACGGGTCTC 1620  
 QY 1621 ACCCATAGACGCCCATCTTCTATCCAGACCAAGAGAGTGGGAAAACTTCTCTAT 1680  
 DB 1621 ACCCATAGACGCCCATCTTCTATCCAGACCAAGAGAGTGGGAAAACTTCTCTAT 1680  
 QY 1681 CTGTAAGGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGCTGTGGAC 1740  
 DB 1681 CTGTAAGGTACCAAGCCACCGTGTGCGCTAGAGCTCAAGCCCTCCCGCTGTGGAC 1740  
 QY 1741 CAGATGGAAGTGTGATCCGTCTCAAGCCACCTCCATGGGCAACACTGTGCTA 1800  
 DB 1741 CAGATGGAAGTGTGATCCGTCTCAAGCCACCTCCATGGGCAACACTGTGCTA 1800  
 QY 1801 TATAGACTGGGCTGTCCAGATGAGTCAACCTTGAACGACCAAGTATATC 1860  
 DB 1801 TATAGACTGGGCTGTCCAGATGAGTCAACCTTGAACGACCAAGTATATC 1860  
 QY 1861 ATGACATGATGTGCGCTGACCTGAGAGTCTGACAGATGCTTGGGTCTGTTGGCG 1920  
 DB 1861 ATGACATGATGTGCGCTGACCTGAGAGTCTGACAGATGCTTGGGTCTGTTGGCG 1920  
 QY 1921 GTTCTGCTGCTTGGCGCGGATGCTTATCAAGGCTGTGCTGATAGTATAGT 1980  
 DB 1921 GTTCTGCTGCTTGGCGCGGATGCTTATCAAGGCTGTGCTGATAGTATAGT 1980  
 QY 1981 ATGTCTTGTCCGAAAGCGGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTC 2040  
 DB 1981 ATGTCTTGTCCGAAAGCGGCAATCATACCCGACAGGAAAGTCTTACCGGAGTTC 2040  
 QY 2041 GATGAATGAAAGAGTCTGA 2061  
 DB 2041 GATGAATGAAAGAGTCTGA 2061

RESULT 4  
 US-11-249-893-1  
 ; Sequence 1, Application US/11249893  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Matti Salberg  
 ; TITLE OF INVENTION: A HEPATITIS C VIRUS NON-STRUCTURAL  
 ; FILE REFERENCE: TRIPEP.028C1  
 ; CURRENT APPLICATION NUMBER: US/11/249,893  
 ; PRIOR FILING DATE: 2005-10-13  
 ; PRIOR APPLICATION NUMBER: 09/930,591  
 ; PRIOR FILING DATE: 2001-08-15  
 ; PRIOR APPLICATION NUMBER: 60/225,767  
 ; PRIOR FILING DATE: 2000-08-17  
 ; PRIOR APPLICATION NUMBER: 60/229,175  
 ; PRIOR FILING DATE: 2000-08-29  
 ; NUMBER OF SEQ ID NOS: 34  
 ; SOFTWARE: FastSeq for Windows Version 4.0  
 ; SEQ ID NO 1  
 ; LENGTH: 2061  
 ; TYPE: DNA  
 ; ORGANISM: Artificial Sequence  
 ; FEATURE:  
 ; OTHER INFORMATION: Hepatitis C virus NS3/4A coding region  
 US-11-249-893-1

Query Match 100.0%; Score 2061; DB 72; Length 2061;  
 Best Local Similarity 100.0%; Pred. No. 0;  
 Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

1 ATGGGCGCTATCAGGGCCCTATGCGCCAGAGACAAGGGGCTTTGGGATGATATCAAC 60  
1 ATGGGCGCTATCAGGGCCCTATGCGCCAGAGACAAGGGGCTTTGGGATGATATCAAC 60  
61 AGCTTGACCGGCGGGGACAAAAACAGGTGAGGGTGAAGTTCAAGTCTGTCAACTGCT 120  
61 AGCTTGACCGGCGGGGACAAAAACAGGTGAGGGTGAAGTTCAAGTCTGTCAACTGCT 120  
121 GCCGAGACTTTTGGGCAACTGCAATTAACGGGGTGTGTGAGACTGTCAACATGAGGCC 180  
121 GCCGAGACTTTTGGGCAACTGCAATTAACGGGGTGTGTGAGACTGTCAACATGAGGCC 180  
181 GGAACAAGGACCATGCGTCACTAAGGGTCCGTATCATAGATGACCAATGAGAC 240  
181 GGAACAAGGACCATGCGTCACTAAGGGTCCGTATCATAGATGACCAATGAGAC 240  
241 CAAGAAGCTTGAGGTGGCCGCTCCCAAGGTGCGCGCTCATTAACAACATGACTTGC 300  
241 CAAGAAGCTTGAGGTGGCCGCTCCCAAGGTGCGCGCTCATTAACAACATGACTTGC 300  
301 GGCTCTCGGACCTTTAAGTGTGACGAGAGACGCGGATGATATTCGTGTGCGGAGCG 360  
301 GGCTCTCGGACCTTTAAGTGTGACGAGAGACGCGGATGATATTCGTGTGCGGAGCG 360  
361 GGTTGAGGAGGGGAGCGCTTTCGCGCCGCGCTCATCTTAAGTGAAGAGCTCTGCG 420  
361 GGTTGAGGAGGGGAGCGCTTTCGCGCCGCGCTCATCTTAAGTGAAGAGCTCTGCG 420  
421 GGAAGGCGCTCTGTGCGCCGCGAGACATGCGCGTGAAGCATTAAGACGCGGATGAC 480  
421 GGAAGGCGCTCTGTGCGCCGCGAGACATGCGCGTGAAGCATTAAGACGCGGATGAC 480  
481 ACCCGTGAAGTGGCTTAAGCGGCGTGAATTCATCCCGTGAAGAGCTTAAGACCAATG 540  
481 ACCCGTGAAGTGGCTTAAGCGGCGTGAATTCATCCCGTGAAGAGCTTAAGACCAATG 540  
541 AGCGGTGAGTGGCTTAAGCGGCGTGAATTCATCCCGTGAAGAGCTTAAGACCAATG 540  
541 AGCGGTGAGTGGCTTAAGCGGCGTGAATTCATCCCGTGAAGAGCTTAAGACCAATG 540  
541 AGGTCGCGGCTTTCGAGACAATCTCTCCCAAGAGAGTCCCGAGAGCTACCAAGTG 600  
541 AGGTCGCGGCTTTCGAGACAATCTCTCCCAAGAGAGTCCCGAGAGCTACCAAGTG 600  
601 GCCCACTGTCATGCTCCCAAGCGGAGCGGTGAAGAGCAAGAGTCCCGGCGCATACGA 660  
601 GCCCACTGTCATGCTCCCAAGCGGAGCGGTGAAGAGCAAGAGTCCCGGCGCATACGA 660  
661 GCTCAGGGGCTAAGGTGCTGCTGCTCAACCCCTCGTTCGCAACAATGGGCTTTGGT 720  
661 GCTCAGGGGCTAAGGTGCTGCTGCTCAACCCCTCGTTCGCAACAATGGGCTTTGGT 720  
721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAACATCAGGACTGAGGAGTGAACAAT 780  
721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAACATCAGGACTGAGGAGTGAACAAT 780  
781 ACTTACATGTCGAAGGCCCATGAGATTGATCTTAACATCAGGACTGAGGAGTGAACAAT 840  
781 ACTTACATGTCGAAGGCCCATGAGATTGATCTTAACATCAGGACTGAGGAGTGAACAAT 840  
841 TGAAGGGGCTTATGACATTAATTTGTGACAGTGCACCTCAAGATGCAATC 900  
841 TGAAGGGGCTTATGACATTAATTTGTGACAGTGCACCTCAAGATGCAATC 900  
901 ATCTTGGGCTTATGACATTAATTTGTGACAGTGCACCTCAAGATGCAATC 960  
901 ATCTTGGGCTTATGACATTAATTTGTGACAGTGCACCTCAAGATGCAATC 960  
961 CTGCGCACCGCTACCCCTCGGGCTCCGTCATGTCGCCCATCTTAACATGAGAGGTT 1020  
961 CTGCGCACCGCTACCCCTCGGGCTCCGTCATGTCGCCCATCTTAACATGAGAGGTT 1020  
1021 GCTCTGTCCACTACCGGAGAGATCCCTTTTATGCAAGGCTATTCCTCTGAAGCAATT 1080  
1021 GCTCTGTCCACTACCGGAGAGATCCCTTTTATGCAAGGCTATTCCTCTGAAGCAATT 1080

1081 AAGGGGGAGACATCTCATCTTCTGACCACTCAAGAGAGAGTGGACGAGCTCCGCGCA 1140  
1081 AAGGGGGAGACATCTCATCTTCTGACCACTCAAGAGAGAGTGGACGAGCTCCGCGCA 1140  
1141 AAACGTGCGGCTTGGGCGTCAATCCGCTTACTAACCAGGCTTGTATGTCCGTC 1200  
1141 AAACGTGCGGCTTGGGCGTCAATCCGCTTACTAACCAGGCTTGTATGTCCGTC 1200  
1201 ATCCGACCAATGGGAGGTTGTGTGCTGCTGGCAATGACGCGCTCATGACCGGCTTTACC 1260  
1201 ATCCGACCAATGGGAGGTTGTGTGCTGCTGGCAATGACGCGCTCATGACCGGCTTTACC 1260  
1261 GCGCAGCTTGATTCGCTGATGACCTGCAACAGTGTGTCACCCAGACAGTGCATTCAGC 1320  
1261 GCGCAGCTTGATTCGCTGATGACCTGCAACAGTGTGTCACCCAGACAGTGCATTCAGC 1320  
1321 GTCGACCTTACCTTACCAATTAAGACATCAAGCTTCCCAAGATGCTGTCCGCTACT 1380  
1321 GTCGACCTTACCTTACCAATTAAGACATCAAGCTTCCCAAGATGCTGTCCGCTACT 1380  
1381 CAAGCTGGGGTGAAGGACCTGGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1440  
1381 CAAGCTGGGGTGAAGGACCTGGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1440  
1441 GAGCGTCCCTTCTGAGATGTTGACTGCTGTCTCTGCTGAGTGTGATGACGCGGATGT 1500  
1441 GAGCGTCCCTTCTGAGATGTTGACTGCTGTCTCTGCTGAGTGTGATGACGCGGATGT 1500  
1501 GCTTGTATGACTTAAGCGCCGCGGAGACCAAGTTAGGCTTACGAGCATATGAACACC 1560  
1501 GCTTGTATGACTTAAGCGCCGCGGAGACCAAGTTAGGCTTACGAGCATATGAACACC 1560  
1561 CGGGACTTCCCGTGTGCAAGACCATCTTGAATTTGGAGGGGCTTTAGGGGCTTC 1620  
1561 CGGGACTTCCCGTGTGCAAGACCATCTTGAATTTGGAGGGGCTTTAGGGGCTTC 1620  
1621 ACCCATAGAGCGCCCACTTCTATCCAGACAAGAGAGTGGGAAAACTTCCCTAT 1680  
1621 ACCCATAGAGCGCCCACTTCTATCCAGACAAGAGAGTGGGAAAACTTCCCTAT 1680  
1681 CTGCTAGGCTACCAAGCCACGCTGTGCTGAGGCTCAAGCCCTCCCGCTGTGGGAC 1740  
1681 CTGCTAGGCTACCAAGCCACGCTGTGCTGAGGCTCAAGCCCTCCCGCTGTGGGAC 1740  
1741 CAGATGGAAGTGTGATCCGCTCAAGGCCAACCCTCCAGTGGGCAACCTCTGCTA 1800  
1741 CAGATGGAAGTGTGATCCGCTCAAGGCCAACCCTCCAGTGGGCAACCTCTGCTA 1800  
1801 TATAGACTGGGCGCTGTCAGATGAGTCAACCTGACGCAACCAAGTATATC 1860  
1801 TATAGACTGGGCGCTGTCAGATGAGTCAACCTGACGCAACCAAGTATATC 1860  
1861 ATGACATGATGTGCGCTGACCTGAGAGTCTGACGAGTACTGGGTCTGTTGGCGGC 1920  
1861 ATGACATGATGTGCGCTGACCTGAGAGTCTGACGAGTACTGGGTCTGTTGGCGGC 1920  
1921 GTTCTGGCTCTTGGCGCGCGATGCTTATCAAGGCTGGGTGCTATAGAGTATG 1980  
1921 GTTCTGGCTCTTGGCGCGCGATGCTTATCAAGGCTGGGTGCTATAGAGTATG 1980  
1981 ATTGTCTTGTCCGAAACCGGCAATCATACCCGACAGGAAAGTCTTACCGGGAGTTTC 2040  
1981 ATTGTCTTGTCCGAAACCGGCAATCATACCCGACAGGAAAGTCTTACCGGGAGTTTC 2040  
2041 GATGAATGAAAGAGTCTGA 2061  
2041 GATGAATGAAAGAGTCTGA 2061

RESULT 5  
US-60-685-014-1  
; Sequence 1, Application US/60685014  
; GENERAL INFORMATION:





Db 1861 ATGACATGATGTCGGCTGACCTGAGAGTGTCTACAGATACCTGGGTGCTCTGGCGGC 1920  
Qy 1921 GTTCTGGCTGCTTGGCCGCGATATTGCCATACAGGCTGTGCTGCTATAGTAG 1980  
Db 1921 GTTCTGGCTGCTTGGCCGCGATATTGCCATACAGGCTGTGCTGCTATAGTAG 1980  
Qy 1981 ATTGCTTGTCCGGAAGCCGCAATCATACCCGACAGGGAAGTCTTACCCGGAGTTC 2040  
Db 1981 ATTGCTTGTCCGGAAGCCGCAATCATACCCGACAGGGAAGTCTTACCCGGAGTTC 2040  
Qy 2041 GATGAATGGAAGAGTCTGA 2061  
Db 2041 GATGAATGGAAGAGTCTGA 2061  
  
RESULT 6  
US-60-685-035-163  
/ Sequence 163, Application US/60685035  
/ GENERAL INFORMATION:  
/ APPLICANT: Jordan, Frederick  
/ APPLICANT: Sallberg, Matti  
/ TITLE OF INVENTION: TRANSDERMAL FORMULATIONS CONTAINING  
/ TITLE OF INVENTION: HEPATITIS C VIRUS IMMUNOGENS  
/ FILE REFERENCE: TRIPEP, 079PR  
/ CURRENT APPLICATION NUMBER: US/60/685,035  
/ NUMBER OF SEQ ID NOS: 201  
/ SOFTWARE: FastSeq for Windows Version 4.0  
/ SEQ ID NO 163  
/ LENGTH: 2061  
/ TYPE: DNA  
/ ORGANISM: Artificial Sequence  
/ FEATURE:  
/ OTHER INFORMATION: Hepatitis C Virus NS3/4A coding region  
US-60-685-035-163  
  
Query Match 100.0%; Score 2061; DB 82; Length 2061;  
Best Local Similarity 100.0%; Pred. No. 0;  
Matches 2061; Conservative 0; Mismatches 0; Indels 0; Gaps 0;

Db 481 ACCCGTAGAGTGGCTAAAGCCGCTGAGCTTCATCCCGTAGAGAGTGTAGAGCAACCATG 540  
Qy 541 AGGTCCCGGAGTGTCTGAGACAATCTCTCCGACAGAGATGCCGACAGCTACCAAGT 600  
Db 541 AGGTCCCGGAGTGTCTGAGACAATCTCTCCGACAGAGATGCCGACAGCTACCAAGT 600  
Qy 601 GCCCACTGCAATGCTCCCAACCGGAGCGGTAAAGACCAAGAGTCCCGGCGCATACGCA 660  
Db 601 GCCCACTGCAATGCTCCCAACCGGAGCGGTAAAGACCAAGAGTCCCGGCGCATACGCA 660  
Qy 661 GCTCAGGCTACCAAGTGTGTCTCAACCCCTCGTGTCTGCAACAATGAGCTTTGTGT 720  
Db 661 GCTCAGGCTACCAAGTGTGTCTCAACCCCTCGTGTCTGCAACAATGAGCTTTGTGT 720  
Qy 721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAATCAAGATCTGGGTGAGACAAATT 780  
Db 721 GCTTACATGTCGAAGGCCCATGAGATTGATCTTAATCAAGATCTGGGTGAGACAAATT 780  
Qy 781 ACTACTGAGCGCGGATGACGATTCACACTACGCGCAAGTTCCTTGCCGACGCGGAGTGT 840  
Db 781 ACTACTGAGCGCGGATGACGATTCACACTACGCGCAAGTTCCTTGCCGACGCGGAGTGT 840  
Qy 841 TCAGGAGGAGTCTTATGACATATAATTTGTGACGAGTGCACCTCCAGATGCAATCC 900  
Db 841 TCAGGAGGAGTCTTATGACATATAATTTGTGACGAGTGCACCTCCAGATGCAATCC 900  
Qy 901 ATCTTGGGCTATGGGACATGTCTCTTACCAAGAGAGACCGCGGGGCGAGACTGTG 960  
Db 901 ATCTTGGGCTATGGGACATGTCTCTTACCAAGAGAGACCGCGGGGCGAGACTGTG 960  
Qy 961 CTCGCGACCGGCTACCCCTCCGGGCTCGGTCACTGAGCCCATCTTAACGAGAGGTT 1020  
Db 961 CTCGCGACCGGCTACCCCTCCGGGCTCGGTCACTGAGCCCATCTTAACGAGAGGTT 1020  
Qy 1021 GCTCTGTCCACTACCGGAGAGATCCCTTTATGCGAAGCTATTCCCTTGAAGCAATT 1080  
Db 1021 GCTCTGTCCACTACCGGAGAGATCCCTTTATGCGAAGCTATTCCCTTGAAGCAATT 1080  
Qy 1081 AAGGGGGGAGACATCTCATCTTCTGCGCATCAAGAAAGAAAGTGGAGAGTCCCGCA 1140  
Db 1081 AAGGGGGGAGACATCTCATCTTCTGCGCATCAAGAAAGAAAGTGGAGAGTCCCGCA 1140  
Qy 1141 AAACGTGTGCGGTTGGGCGGTCAATGCGGTGCTTACTACGCGGCTTGATGTCCGTC 1200  
Db 1141 AAACGTGTGCGGTTGGGCGGTCAATGCGGTGCTTACTACGCGGCTTGATGTCCGTC 1200  
Qy 1201 ATCCGACCAAGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1260  
Db 1201 ATCCGACCAAGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1260  
Qy 1261 GCGCATCTTGATCGGTGATAGACTGCAACAGTGTGTCAACCAAGTGTCAACCTTCA 1320  
Db 1261 GCGCATCTTGATCGGTGATAGACTGCAACAGTGTGTCAACCAAGTGTCAACCTTCA 1320  
Qy 1261 GCGCATCTTGATCGGTGATAGACTGCAACAGTGTGTCAACCAAGTGTCAACCTTCA 1320  
Db 1261 GCGCATCTTGATCGGTGATAGACTGCAACAGTGTGTCAACCAAGTGTCAACCTTCA 1320  
Qy 1321 CTGACCCCTTACCATGAGCAATCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380  
Db 1321 CTGACCCCTTACCATGAGCAATCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1380  
Qy 1381 CAACGTGCGGAGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1440  
Db 1381 CAACGTGCGGAGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1440  
Qy 1441 GAGGCTCTTCTGAGATGTTGATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1500  
Db 1441 GAGGCTCTTCTGAGATGTTGATCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1500  
Qy 1501 GCTTGTATGAGCTTAACGCGCGGAGACCAAGTGTGTGTGTGTGTGTGTGTGTGTGT 1560  
Db 1501 GCTTGTATGAGCTTAACGCGCGGAGACCAAGTGTGTGTGTGTGTGTGTGTGTGTGT 1560  
Qy 1561 CCGGACTTCCCGTGTGCAAGACCATCTTGAATTTTGGAGGAGGCTTTTACGAGTCTC 1620  
Db 1561 CCGGACTTCCCGTGTGCAAGACCATCTTGAATTTTGGAGGAGGCTTTTACGAGTCTC 1620



Db 1561 CCGGAGCTTCCCGTGTGCGCAAGACCATCTTGATTTTGGAGGGCGTCTTACGCGGTCTC 1620  
Qy 1621 ACCCACTATGACCGCCACTTCTTATCCAGACAAAGCAGAGTGGGAAAACCTTCCCTAT 1680  
Db 1621 ACCCACTATGACCGCCACTTCTTATCCAGACAAAGCAGAGTGGGAAAACCTTCCCTAT 1680  
Qy 1681 CTGTGAGGTATCCAGACCAACCGTGTGCGTAGAGCTCAAGCCCTCCCGTGTGGAGC 1740  
Db 1681 CTGTGAGGTATCCAGACCAACCGTGTGCGTAGAGCTCAAGCCCTCCCGTGTGGAGC 1740  
Qy 1741 CAGATGTGAAAGTCTTATATCCGTCTCAAGCCACCTTCCATGAGGCAACCTTGTCTA 1800  
Db 1741 CAGATGTGAAAGTCTTATATCCGTCTCAAGCCACCTTCCATGAGGCAACCTTGTCTA 1800  
Qy 1801 TATATACCTGAGGCGCTGTCCAGATGAGTCAACCTGAGCACCAGTCAACCAAGTATATC 1860  
Db 1801 TATATACCTGAGGCGCTGTCCAGATGAGTCAACCTGAGCACCAGTCAACCAAGTATATC 1860  
Qy 1861 ATGACATGATATGCTGCGTGTCAAGAGTCTCAAGAGTCAAGTCTGAGTGTGCGGAC 1920  
Db 1861 ATGACATGATATGCTGCGTGTCAAGAGTCTCAAGAGTCAAGTCTGAGTGTGCGGAC 1920  
Qy 1921 GTTCTGCTGCTTGTGCGCGGTATGCTTATCCAGAGCTGCTGTCTATGATAGTATAG 1980  
Db 1921 GTTCTGCTGCTTGTGCGCGGTATGCTTATCCAGAGCTGCTGTCTATGATAGTATAG 1980  
Qy 1981 ATTGCTTGTCTGCGGAAAGCGGCAATCATACCCGACAGGAAAGTCTCTACCGGAGTTTC 2040  
Db 1981 ATTGCTTGTCTGCGGAAAGCGGCAATCATACCCGACAGGAAAGTCTCTCTACCGGAGTTTC 2040  
Qy 2041 GATGAATGGAAGAGTGTCTGA 2061  
Db 2041 GATGAATGGAAGAGTGTCTGA 2061

## RESULT 7

US-09-721-479B-6

Sequence 6, Application US/09721479B

GENERAL INFORMATION:  
APPLICANT: Colt, Doris  
APPLICANT: Medina-Selby, Angelica  
APPLICANT: Selby, Mark  
APPLICANT: Houghton, Michael  
TITLE OF INVENTION: NOVEL HCV NON-STRUCTURAL POLYPEPTIDE  
FILE REFERENCE: PP01617.002  
CURRENT APPLICATION NUMBER: US/09/721,479B  
NUMBER OF SEQ ID NOS: 19  
SOFTWARE: PatentIn Ver. 2.0  
SEQ ID NO 6  
LENGTH: 6299  
TYPE: DNA  
ORGANISM: Artificial Sequence  
FEATURE:  
OTHER INFORMATION: Description of Artificial Sequence: pns34a  
NAME/KEY: CDS  
LOCATION: (1990)..(4047)  
US-09-721-479B-6

Query Match 86.7%; Score 1787; DB 31; Length 6299;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1889; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

Qy 1 ATGGCGCTATACAGGCTTATGCTCCAGACAGACAGAGGCGCTTTGGAGTGCATATACCC 60  
Db 1990 ATGGCGCTATACAGGCTTATGCTCCAGACAGACAGAGGCGCTTTGGAGTGCATATACCC 2049  
Qy 61 AGCTGACCGGCGGAGCAAAAACAGGTGAGGAGTCAATGCTGCAACTGCT 120  
Db 2050 AGCTGACCGGCGGAGCAAAAACAGGTGAGGAGTCAATGCTGCAACTGCT 2109  
Qy 121 GCCCAAGCTTCTTGGCAACTGCAATTAAGGGGTGTGTTGAGTGTCAACATGAGGCC 180  
Db 121 GCCCAAGCTTCTTGGCAACTGCAATTAAGGGGTGTGTTGAGTGTCAACATGAGGCC 180

Db 2110 GCCCAAGCTTCTTGGCAACTGCAATTAAGGGGTGTGTTGAGTGTCAACATGAGGCC 2169  
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Db 2170 GGAACAGAGCAATTTGCTGCTTAAAGGCTCTGTTATCCAGATGATTAATCAATGTGAGC 2229  
Qy 241 CAAGACTCTGATAGGTGCGCGCTCCCAAGGTGCGCTCATTTAAACATGACCTTTC 300  
Db 2230 CAAGACTCTGATAGGTGCGCGCTCCCAAGGTGCGCTCATTTAAACATGACCTTTC 2289  
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Db 2290 GACTCTTGGACCTTTACCTGCTCAAGAGCAACCGCATGCTATTTCTGTGCGCGAGCG 2349  
Qy 361 GGTATGACAGGGAGGCTGCTTGGCGCGGCTTACTGTTATGAAAGGCTCTCG 420  
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Qy 481 ACCGTGAGTGTGCTTAAAGCGGTGATCTTATCCCGTATGAGAGCTTATGAGCAACATG 540  
Db 2470 ACCGTGAGTGTGCTTAAAGCGGTGATCTTATCCCGTATGAGAGCTTATGAGCAACATG 2529  
Qy 541 AGGTCCCGGTGTTCTGAGACAACTCTCCACAGAGAGCGCCAGAGTCAACAGT 600  
Db 2530 AGGTCCCGGTGTTCTGAGACAACTCTCTCCACAGAGAGTCCCAAGAGCTTCCAGGTT 2589  
Qy 601 GCCCACTGATGCTCCACCGCGAGCGGTAAAGACACCAAGTCCCGCGCATATACGA 660  
Db 2590 GCTACCTTCATGCTCCACAGGAGCGGCAAAACCAAGTCCCGCGCATATACGA 2649  
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Qy 781 ACTACCTGACGCGCATGATGATCTTCACTGAGCAAGTCTCTTGCAGCGCGGCTGT 840  
Db 2770 ACTACCTGACGCGCATGATGATCTTCACTGAGCAAGTCTCTTGCAGCGCGGCTGT 2829  
Qy 841 TCAGGAGGTGCTTATGACATAATTAATTTGTGACAGTGTCACTCAACGATCAACATTC 900  
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Qy 1021 GCTCTGTCTACCTACCGAGAGATCCCTTTATGCGAAGGCTATTCCTCTTAAGCAATT 1080  
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Db 3130 AAATGTGTGCTGTGGGCTCAATGCGGTGCTTACTACCGGCGCTTGTATGTCCGTC 3189  
Qy 1201 ATCCGACCAAGTGTGACGTTGTGTGTGTGCACTGACGCTCATGACCGGCTTTAC 1260  
Db 3190 ATCCGACCAAGTGTGACGTTGTGTGTGTGCACTGACGCTCATGACCGGCTTTAC 3249

QY 1261 GGCGACTTCGATTCGGGTGATAGACTGCAACAGTGTGTCAACCCAGACAGTGTGACTTCACG 1320  
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DB 3310 CTTGACCCCTACCTTACCATTTGAGCAATACAGCTTCCCGAGATGCTGTCTCCGATCT 3369  
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DB 3370 CAACGTCGGGGTGAAGACTGGCAAGAGGAAAGCAAGCATCTACAGATTGTGTGCAACCGGG 3429  
QY 1441 GAGCGCTCTTCGGGATGTTTGAATCTGTGTCTCTGTGAGTGTGATGAGCGGGTGT 1500  
DB 3430 GAGCGCTCTTCGGGATGTTTGAATCTGTGTCTCTGTGAGTGTGATGAGCGGGTGT 3489  
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DB 3490 GCTTGGTATGACTTACAGCCCGCCAGACCAAGTTAGGCTACGAGCATACATGAACAC 3549  
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QY 1741 CAGATGTGAAGTCTTGTATCCGTCTCAAGCCCACTTCATGAGGCAACACTCTGTCTA 1800  
DB 3730 CAGATGTGAAGTCTTGTATCCGTCTCAAGCCCACTTCATGAGGCAACACTCTGTCTA 3789  
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DB 3790 TATTAAGTGGGGGCTGTCCAGAAATGAATGACCTTCAGACCCCACTTCAGAAATGAATG 3849  
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DB 3850 ATGACATGTATGTGGCTGACCTGAGAGTGTCTCAAGAGTACCTGTGTGTCTGTGTGAGC 3909  
QY 1921 GTTCTGCTGCTTGTGGCCGCTATGCTATCAAGGCTGTGTGTCTATGAGTGTGAG 1980  
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QY 1981 ATTGTCTTGTGGGAAAGCCGCAATCAATCCGACAGAGGAGTCTCTTACCGGAGTTC 2040  
DB 3970 ATTGTCTTGTGGGAAAGCCGCAATCAATCCGACAGAGGAGTCTCTTACCGGAGTTC 4029  
QY 2041 GATGAATGGAAGTGTCT 2059  
DB 4030 GATGAATGGAAGTGTCT 4048

RESULT 8  
US-11-195-009-6  
; Sequence 6, Application US/11195009  
; GENERAL INFORMATION:  
; APPLICANT: Colt, Doris  
; APPLICANT: Medina-Selby, Angelica  
; APPLICANT: Selby, Mark  
; APPLICANT: Houghton, Michael  
; TITLE OF INVENTION: NOVEL HCV NON-STRUCTURAL POLYPEPTIDE  
; FILE REFERENCE: P01617.002  
; CURRENT APPLICATION NUMBER: US/11/195, 009  
; CURRENT FILING DATE: 2005-08-02  
; PRIOR APPLICATION NUMBER: US/09/721, 479  
; PRIOR FILING DATE: 2000-11-22  
; NUMBER OF SEQ ID NOS: 19

SOFTWARE: PatentIn Ver. 2.0  
; SEQ ID NO 6  
; LENGTH: 6299  
; TYPE: DNA  
; ORGANISM: Artificial Sequence  
; FEATURE:  
; OTHER INFORMATION: Description of Artificial Sequence: pns34a  
; NAME/KEY: CDS  
; LOCATION: (1990)..(4047)  
US-11-195-009-6

Query Match 86.7%; Score 1787; DB 71; Length 6299;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1889; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

QY 1 ATGGCGCTTATCAGCGCTTATGCCCCAGACCAAGAGGCGCTTTGGATGATATCAC 60  
DB 1990 ATGGCGCTTATCAGCGCTTATGCCCCAGACCAAGAGGCGCTTGGATGATATCAC 2049  
QY 61 AGCTTGAACCGGCGGAGCAAAAACCAAGTGAAGGTGAGTTCAATGCTTCACTGCT 120  
DB 2050 AGCTTGAACCGGCGGAGCAAAAACCAAGTGAAGGTGAGTTCAATGCTTCACTGCT 2109  
QY 121 GCCCAGACTTCTTGGCAACCTGATTAACGAGGAGTGTGGAAGTGTCTACCATGAGGC 180  
DB 2110 GCCCAGACTTCTTGGCAACCTGATTAACGAGGAGTGTGGAAGTGTCTACCATGAGGC 2169  
QY 181 GGAAACAGAGACATTTGCTCACTTAAGGCTCTGTTATCCAGATGTACCAATGTGAC 240  
DB 2170 GGAAACAGAGACATTTGCTCACTTAAGGCTCTGTTATCCAGATGTATCAATGTGAC 2229  
QY 241 CAAAGCTCTGTAAGTGTGCGCCCTCCCAAGTGTGCGCCCTCAATTAACCAATGACCTTGC 300  
DB 2230 CAAAGCTCTGTAAGTGTGCGCCCTCCCAAGTGTGCGCCCTCAATTAACCAATGACCTTGC 2289  
QY 301 GGCCTCTGGAACCTTACCTGATCAAGAGGACGAGGAGTGTCTGTGCGCGACGAG 360  
DB 2290 GGCCTCTGGAACCTTACCTGATCAAGAGGACGAGGAGTGTCTGTGCGCGACGAG 2349  
QY 361 GGTGATGACAGGAGGAGCTTGTGCGCGGCTTATCTTACTTGAAGGCTTCTCG 420  
DB 2350 GGTGATGACAGGAGGAGCTTGTGCGCGGCTTATCTTACTTGAAGGCTTCTCG 2409  
QY 421 GGAAGCCCTCTGCTGTGCGCGGAGGAGTGTGCGGAGTGTGCGGAGTGTGCGGAGTGTG 480  
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DB 2470 ACCGCTGAGTGTGCTTAAGAGGCTTCAATCCCGTGAAGAGTGTGAGAGCAACATG 2529  
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Qy 1201 ATCCGACCAAGTGTGACGTTGTGCTGTGCGCACTGACGCGCTCATGACCGGCTTATCC 1260
Db 3190 ATCCGACCAAGGCGGAGTGTGTGCTGTGCGCACTGACGCGGCTCATGACCGGCTATACC 3249
Qy 1261 GCGGACTTGTGATCGGTGATAGACTGCAACAGTGTGTACCCGACAGTGCATTCAGC 1320
Db 3250 GCGGACTTGTGATCGGTGATAGACTGCAATAGTGTGTACCCGACAGTGCATTCAGC 3309
Qy 1321 CTGACCCCTACCTTACCACTTGAACAATCAAGCTTCCGAGAGAGTGTGCTCCGCTACT 1380
Db 3310 CTGACCCCTACCTTACCACTTGAACAATCAAGCTTCCGAGAGAGTGTGCTCCGCTACT 3369
Qy 1381 CAACGTCGCGGGTAGAGACTGGCAAGAGAGAGCCAGCATCTACAGATTTGTGCAACGCGG 1440
Db 3370 CAACGTCGCGGGTAGAGACTGGCAAGAGAGAGCCAGCATCTACAGATTTGTGCAACGCGG 3429
Qy 1441 GAGCCTCTTCTGCAATGTTTGTACTGTCTGTCTCTGAGAGTGTGTAAGCGGGTGT 1500
Db 3430 GAGCCTCTTCTGCAATGTTTGTACTGTCTGTCTCTGAGAGTGTGTAAGCGGGTGT 3489
Qy 1501 GCTGTGTAGAGCTTACGCGCGCGAGACCAAGTTAGGCTAGAGCATATGAACACC 1560
Db 3490 GCTGTGTAGAGCTTACGCGCGCGAGACCAAGTTAGGCTAGAGCATATGAACACC 3549
Qy 1561 CCGGACTTCCCGTGTGCGAAGACCATCTTGAATTTGGAGGGGCTTTTACGGGCTTC 1620
Db 3550 CCGGACTTCCCGTGTGCGAAGACCATCTTGAATTTGGAGGGGCTTTTACAGGCTTC 3609
Qy 1621 ACCCATATGAGCCCACTTCTATCCAGACAAAGAGAGTGGGAGAACTTCTCTAT 1680
Db 3610 ACTCATATATGAGCCCACTTCTATCCAGACAAAGAGAGTGGGAGAACTTCTCTAT 3669
Qy 1681 CTGTGAGGCTACCAAGCAACCGGTGCGTAGAGCTCAAGCCCTCCCGGTGAGGAC 1740
Db 3670 CTGTGAGGCTACCAAGCAACCGGTGCGTAGAGGCTCAAGCCCTCCCGGTGAGGAC 3729
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Qy 1861 ATGACATGATGTGGGCTGACCTGAGAGGCTCAAGAGTACTGTGCTGTGCGGCG 1920
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Qy 1921 GTTCTGTGCTTGTGGCGCGTATGCTATCAGAGGCTGTGCTCATATGATGATAG 1980
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Db 3910 GTCTGTGCTTGTGGCGCGGTATGCTGTCAACAGGCTGCTGATCATAGTGGGCAAG 3969
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Db 3970 GTGCTGTGTCCGGAAGCCGCAATCATCTGACAGGGAAGTCTTACCGAGATTC 4029
Qy 2041 GATGAATGGAAGAGTGTCT 2059
Db 4030 GATGAGATGGAAGAGTGTCT 4048

RESULT 9
US-08-403-590B-74
; Sequence 74, Application US/08403590B
; GENERAL INFORMATION:
; APPLICANT: Chien, David Y.
; APPLICANT: Rutler, William J.
; TITLE OF INVENTION: NANBV Diagnostics and Vaccines
; NUMBER OF SEQUENCES: 777
; CORRESPONDENCE ADDRESS:
; ADDRESSEE: Chiron Corporation
; STREET: 4560 Horton Street
; CITY: Emeryville
; STATE: CA
; COUNTRY: USA
; ZIP: 94608-2916
; COMPUTER READABLE FORM:
; MEDIUM TYPE: Floppy disk
; COMPUTER: IBM PC compatible
; OPERATING SYSTEM: PC-DOS/MS-DOS
; SOFTWARE: Patent In Release #1.0, Version #1.30
; CURRENT APPLICATION DATA:
; APPLICATION NUMBER: US/08/403,590B
; FILING DATE: 14-MAR-1995
; CLASSIFICATION: 424
; ATTORNEY/AGENT INFORMATION:
; NAME: Hardin, Alisa A.
; REGISTRATION NUMBER: 33,895
; REFERENCE/DOCKET NUMBER: 0110,002
; TELECOMMUNICATION INFORMATION:
; TELEPHONE: (508)359-3885
; TELEFAX: (508)359-3876
; INFORMATION FOR SEQ ID NO: 74:
; SEQUENCE CHARACTERISTICS:
; LENGTH: 7310 base pairs
; TYPE: nucleic acid
; STRANDEDNESS: single
; TOPOLOGY: linear
; MOLECULE TYPE: cDNA
; FEATURE:
; NAME/KEY: CDS
; LOCATION: 3..7310
US-08-403-590B-74

Query Match 86.7% Score 1786; DB 14; Length 7310;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

Qy 2 TGGCGCTATACCGGCTATGCGCGAGACAGAGGAGGCTTTGGATGATATACCA 61
Db 1729 TGGCGCCATACCGGCGTACGCGCGAGACAGAGGAGGCTTATGAGTATACCA 1788
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Db 1849 CCCAACCCTTCTGAGCAAGTCAATTAATGAGGAGTGTGAGCTGTACCATGAGCGG 1908
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QY 242 AAGACCTGTAGAGCTGGCCCGCTCCCAAGTCCCGCTCATTAACACACGACTTGG 301  
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Db 2029 GCTCTCGGACCTTTACCTGTACAGAGGACGCGATGTCACTTCTGTGCGCCGCGG 2088  
QY 362 GTGATGGCAGGGGACGCTGTCTTGGCCCGGCTTATCTTACTTGAAGGCTCTCGG 421  
Db 2089 GTGATGGCAGGGGACGCTGTCTTGGCCCGGCTTATCTTACTTGAAGGCTCTCGG 2148  
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QY 1442 AGCGTCTTCTGAGCATGTTTGAATCTGTCTGTCTGTGGAGTGTATGACGCGGTTGG 1501  
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QY 1502 CTGTGTATGAGCTTACGCGCGCGCGAGACACATTAAGCTATGACATGAACACC 1561  
Db 3229 CTGTGTATGAGCTTACGCGCGCGCGAGACACATTAAGCTATGACATGAACACC 3288  
QY 1562 CGGACCTTCCGCTGTGCCAAGACCATCTTGAATTTTGGAGGGCGTCTTACGGGCTTGA 1621  
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Db 3409 TGGTAGCGTACCAAGCCACCGGTGCGTACAGAGTCAAGCCCTCCCGTGTGGAGAC 3468  
QY 1742 AGATGTGAGAGTGTGATTCGCTTCAAGCCCATCTCATAGGGCCCAACCTGTGTAT 1801  
Db 3469 AGATGTGAGAGTGTGATTCGCTTCAAGCCCATCTCATAGGGCCCAACCTGTGTAT 3528  
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; Sequence 74, Application US/08444112  
; GENERAL INFORMATION:  
; APPLICANT: Chien, David Y.  
; APPLICANT: Ruteir, William J.  
; TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
; NUMBER OF SEQUENCES: 777  
; CORRESPONDENCE ADDRESS:  
; ADDRESSEE: Chiron Corporation  
; STREET: 4560 Horton Street  
; CITY: Emeryville  
; STATE: CA  
; COUNTRY: USA  
; ZIP: 94608-2916  
; COMPUTER READABLE FORM:  
; MEDIUM TYPE: Floppy disk  
; OPERATING SYSTEM: PC-DOS/MS-DOS  
; SOFTWARE: PatentIn Release #1.0, Version #1.30

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CURRENT APPLICATION DATA:
APPLICATION NUMBER: US/08/444,112
FILING DATE:
CLASSIFICATION: 435
PRIOR APPLICATION DATA:
APPLICATION NUMBER: US/08/403,590
FILING DATE: 14-MAR-1995
ATTORNEY/AGENT INFORMATION:
NAME: Herbin, Alisa A.
REGISTRATION NUMBER: 33,895
REFERENCE/DOCKET NUMBER: 0110.002
TELEPHONE: (508) 359-3876
TELEFAX: (508) 359-3885
INFORMATION FOR SEQ ID NO: 74:
SEQUENCE CHARACTERISTICS:
LENGTH: 7310 base pairs
TYPE: nucleic acid
STRANDEDNESS: single
TOPOLOGY: linear
MOLECULE TYPE: cDNA
FEATURE:
NAME/KEY: CDS
LOCATION: 3..7310
US-08-444-112-74

Query Match      86.7%; Score 1786; DB 14; Length 7310;
Best Local Simlarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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DB      3049 TTGACCTTACCTTCAACATTTAGACATACAGCTTCCGAGATCTGTCTCCGCTATC 3108
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| | | | |  
QY 1862 TGACATGTATGTCCGCTGACCTGAGAGTGTGTGACAGAGTGTGTGAGGCGG 1921  
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DB 3649 TTCTGCTGTCTTGGCCCGGCTATTCCTATCCACAGGCTGCTGTATAGTAGTAGGA 3708  
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DB 3709 TTGCTTGTCCGAAAGCCGCAATCATACCCGACAGGAGTCTCTTACCGGAGTTG 3768  
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RESULT 11  
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/ Sequence 1, Application US/08436966  
/ GENERAL INFORMATION:  
/ APPLICANT: Miyamura, Tatsuo  
/ APPLICANT: Saito, Izumi  
/ APPLICANT: Houghton, Michael  
/ APPLICANT: Weiner, Amy J.  
/ APPLICANT: Han, Jang  
/ APPLICANT: Kolberg, Janice A.  
/ APPLICANT: Cha, Tai-An  
/ APPLICANT: Irvine, Bruce D.  
/ TITLE OF INVENTION: New HCV Isolates  
/ NUMBER OF SEQUENCES: 70  
/ CORRESPONDENCE ADDRESS:  
/ ADDRESSEE: Chiron Corporation  
/ STREET: 4560 Horton Street  
/ CITY: Emeryville  
/ STATE: CA  
/ COUNTRY: USA  
/ ZIP: 94608-2916  
/ COMPUTER READABLE FORM:  
/ MEDIUM TYPE: Floppy disk  
/ COMPUTER: IBM PC compatible  
/ OPERATING SYSTEM: PC-DOS/MS-DOS  
/ SOFTWARE: Patent Release #1.0, Version #1.30  
/ CURRENT APPLICATION DATA:  
/ APPLICATION NUMBER: US/08/436,966  
/ FILING DATE: 08-MAY-1995  
/ CLASSIFICATION: 536  
/ PRIOR APPLICATION DATA:  
/ APPLICATION NUMBER: US 07/456,142  
/ FILING DATE: 21-DEC-1989  
/ PRIORITY APPLICATION DATA:  
/ APPLICATION NUMBER: US 07/408,045  
/ FILING DATE: 15-SEP-1989  
/ ATTORNEY/AGENT INFORMATION:  
/ NAME: Harbin, Alisa A.  
/ REGISTRATION NUMBER: 33,895  
/ REFERENCE/DOCKET NUMBER: 0089.007  
/ TELECOMMUNICATION INFORMATION:  
/ TELEPHONE: 510-601-3274  
/ TELEFAX: 510-655-3542  
/ INFORMATION FOR SEQ ID NO: 1:  
/ SEQUENCE CHARACTERISTICS:  
/ LENGTH: 9229 base pairs  
/ TYPE: nucleic acid  
/ STRANDEDNESS: single

/ TOPOLOGY: linear  
/ MOLECULE TYPE: other nucleic acid  
/ DESCRIPTION: /desc = "nucleic acid"  
/ HYPOTHETICAL: NO  
/ ANTI-SENSE: NO  
US-08-436-966-1  
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Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;  
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DB 3440 TGGGCGCTATGACGCGCTATGCCAGACAGAGGCGCTTTGGAGTGCATATACCA 3499  
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RESULT 12  
 US-07-722-489-497  
 ; Sequence 497, Application US/07722489  
 ; GENERAL INFORMATION:  
 ; APPLICANT: Chien, David Y.  
 ; APPLICANT: Rutter, William J.  
 ; TITLE OF INVENTION: NANBV Diagnostics and Vaccines  
 ; NUMBER OF SEQUENCES: 524  
 ; CORRESPONDENCE ADDRESS:  
 ; ADDRESSEE: Chiron Corporation  
 ; STREET: 4560 Horton Street  
 ; CITY: Emeryville  
 ; STATE: California  
 ; COUNTRY: USA  
 ; ZIP: 94608  
 ; COMPUTER READABLE FORM:  
 ; MEDIUM TYPE: Floppy disk  
 ; COMPUTER: IBM PC compatible  
 ; OPERATING SYSTEM: PC-DOS/MS-DOS  
 ; SOFTWARE: PatentIn Release #1.0, Version #1.25  
 ; CURRENT APPLICATION DATA:  
 ; APPLICATION NUMBER: US/07/722,489  
 ; FILING DATE: 19910624  
 ; CLASSIFICATION: 435  
 ; ATTORNEY/AGENT INFORMATION:  
 ; NAME: Blackburn, Robert P.  
 ; REGISTRATION NUMBER: 30,447  
 ; REFERENCE/DOCKET NUMBER: 0110.031  
 ; TELECOMMUNICATION INFORMATION:  
 ; TELEPHONE: (510) 601-2702  
 ; TELEFAX: (510) 655-3542(2)  
 ; INFORMATION FOR SEO ID NO: 497:  
 ; SEQUENCE CHARACTERISTICS:  
 ; LENGTH: 9379 Base pairs  
 ; TYPE: NUCLEIC ACID  
 ; STRANDEDNESS: single  
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 ; NAME/KEY: variation  
 ; LOCATION: replace(345, "g")  
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US-07-722-489-497

Query Match      86.7%; Score 1786; DB 7; Length 9379;
Best Local Similarity 91.7%; Pred. No. 0;
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

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DB 3876 CCCGTGAGATGTGCTAAGCGGTGATCTTCAATCCCGGTAGAGCTTTAGAGCAACCATGA 3935
QY 542 GGTCCCGGCTGTTCTAAGCAACTCTTCCCAACAGAGTCCCGAGAGCTTCAAGTGG 601
DB 3936 GGTCCCGGCTGTTCTAAGCAACTCTTCCCAACAGAGTCCCGAGAGCTTCAAGTGG 3995
QY 602 CCACCTGATGTCCACCGAGCGGTAAAGAGCAAGGTCGCGCGCGATACGAG 661
DB 3996 CCACCTGATGTCCACCGAGCGGTAAAGAGCAAGGTCGCGCGCGATACGAG 4055
QY 662 CTGAGGGCTTACAGAGTGTGTGTCAACCCCTCGTTGCTGCAACATGAGGCTTTGGTG 721
DB 721 CTGAGGGCTTACAGAGTGTGTGTCAACCCCTCGTTGCTGCAACATGAGGCTTTGGTG 721
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DB 4056 CTGAGGGCTTATTAAGGTGTGACTCAACCCCTGTGTGTGCAACACTGAGGCTTTGGTG 4115
QY 722 CTGATATGTCCAAAGGCCATGAGATTGATCTTAACATCAAGACTGAGGTTAGAGCAATTA 781
DB 4116 CTGATATGTCCAAAGGCCATGAGATTGATCTTAACATCAAGACTGAGGTTAGAGCAATTA 4175
QY 782 CTACTGAGGCGCGGATCAAGTATTCCACTCAAGGCAAGTCTTCCGAGCGGAGTGT 841
DB 4176 CCACTGAGGCGCGGATCAAGTATTCCACTCAAGGCAAGTCTTCCGAGCGGAGTGT 4235
QY 842 CAGGGGCTGCTTATGACATTAATTTGTGACAGTGCACATCCAGATGCAATCCCA 901
DB 4236 CAGGGGCTGCTTATGACATTAATTTGTGACAGTGCACATCCAGATGCAATCCCA 4295
QY 902 TCTTGGGCAATTGGCACTGTCTTGAACAGAGCAACCGCGGGGCGAGACTGATGCTG 961
DB 4296 TCTTGGGCAATTGGCACTGTCTTGAACAGAGCAACCGCGGGGCGAGACTGATGCTG 4355
QY 962 TCGCACGCTAACCCCTCGGGCTCGTCACTGTGCCCATCTTAACATCGAGAGTGTG 1021
DB 4356 TCGCACGCTAACCCCTCGGGCTCGTCACTGTGCCCATCTTAACATCGAGAGTGTG 4415
QY 1022 CTGTGTCACTACCGAGAGATCCCTTTATAGCAAGCTATTCCCTTGAAACAATTA 1081
DB 4416 CTGTGTCACTACCGAGAGATCCCTTTATAGCAAGCTATTCCCTTGAAACAATTA 4475
QY 1082 AGGGGGAGAGCATTTCTTTCTTGGCACTGAAGAAAGAGGAGCAAGCTGCGCGCA 1141
DB 4476 AGGGGGAGAGCATTTCTTTCTTGGCACTGAAGAAAGAGGAGCAAGCTGCGCGCA 4535
QY 1142 AACTGTGCGGTGGGCTCAATGCGCGGTCTTACTACCGCGGCTTGTGTGCTGCA 1201
DB 4536 AACTGTGCGGTGGGCTCAATGCGCGGTCTTACTACCGCGGCTTGTGTGCTGCA 4595
QY 1202 TCCGACCAATGTGATGCTGTGTGTGCACTGAAGCGCTCATGACCGGCTTTACG 1261
DB 4596 TCCGACCAATGTGATGCTGTGTGTGCACTGAAGCGCTCATGACCGGCTTTACG 4655
QY 1262 GCGACTTGATTCGGGTATGATGCTGCAACAGTGTGTACCCAGACAGTTCAGCC 1321
DB 4656 GCGACTTGATTCGGGTATGATGCTGCAACAGTGTGTACCCAGACAGTTCAGCC 4715
QY 1322 TTGACCTTACCTTACATTTGAGCAATCAAGCTTCCCAAGATGCTGTCCCGTACTC 1381
DB 4716 TTGACCTTACCTTACATTTGAGCAATCAAGCTTCCCAAGATGCTGTCCCGTACTC 4775
QY 1382 AAGCTGAGGATGAGACTGAGCAAGGAAAGCAGGATCTTACAGATTTGTGCAAGCGGG 1441
DB 4776 AAGCTGAGGATGAGACTGAGCAAGGAAAGCAGGATCTTACAGATTTGTGCAAGCGGG 4835
QY 1442 AGCGTCTTGTGGCATGTTTGAATGCTGTCTCTGAGAGTGTATGACGGGGTGTG 1501
DB 4836 AGCGTCTTGTGGCATGTTTGAATGCTGTCTCTGAGAGTGTATGACGGGGTGTG 4895
QY 1502 CTTGTATGAGCTTACGCGCGCGAGACCAAGTTAGGCTTACAGCATACATGAACACC 1561
DB 4896 CTTGTATGAGCTTACGCGCGCGAGACCAAGTTAGGCTTACAGCATACATGAACACC 4955
QY 1562 CGGACCTTCCGCTGTGCAAGACATCTTTGAAATTTGGAGGGCGTCTTTACGGTCTCA 1621
DB 4956 CGGACCTTCCGCTGTGCAAGACATCTTTGAAATTTGGAGGGCGTCTTTACGGTCTCA 5015
QY 1622 CCCACATGAGCGCCACTTCCATCCAGACAAAGAGTGGGGGAAACCTTCCCTATC 1681
DB 5016 CCCACATGAGCGCCACTTCCATCCAGACAAAGAGTGGGGGAAACCTTCCCTATC 5075
QY 1682 TGTAGAGTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTCCCGTGTGTGAGACC 1741
DB 5076 TGTAGAGTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTCCCGTGTGTGAGACC 5135
QY 1742 AGATGTGAAGTGTGATTCGCTCAAGCCCACTTCATGAGGCAACCTCTGTAT 1801
DB 5136 AGATGTGAAGTGTGATTCGCTCAAGCCCACTTCATGAGGCAACCTCTGTAT 5195
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QY 1802 ATAGCTGGGGCTGTCCAGATGAATGATCAACCTTGACGCAACCCAGTCAACCAATATATCA 1861  
| | | | |  
Db 5196 ACAGCTGGGGCTGTTCAGATGAATGATCAACCTTGACGCAACCCAGTCAACCAATATATCA 5255  
| | | | |  
QY 1862 TGACATGATGTGCGCTGACCTGAGGTGTGTACAGATGACCTGAGTGTCTGTGGCGCG 1921  
| | | | |  
Db 5256 TGACATGATGTGCGCGCGCTGAGGTGTGTACAGATGACCTGAGTGTCTGTGGCGCG 5315  
| | | | |  
QY 1922 TTCTGGCTGTGGCGCGCTGTATTCCTATCCACAGGCTGCTGTATGATAGTAGGA 1981  
| | | | |  
Db 5316 TCCTGGCTGTGGCGCGCTGTATTCCTGTCAACAGGCTGCTGTATGATAGTAGGA 5375  
| | | | |  
QY 1982 TTGTCTGTGCGGGAAGCGCGCATCATACCGCAGAGGAGTCTTACCGGAGTTGCG 2041  
| | | | |  
Db 5376 TCCTGTGTGCGGGAAGCGCGCATCATACCGCAGAGGAGTCTTACCGAGATTGCG 5435  
| | | | |  
QY 2042 ATGAATGGAAGAGTGTCT 2059  
| | | | |  
Db 5436 ATGAGATGGAAGAGTGTCT 5453  
| | | | |

RESULT 13  
PCT-US03-19834-1  
; Sequence 1, Application PC/TUS0319834  
; GENERAL INFORMATION:  
; APPLICANT: STAPLETON, JACK T.  
; APPLICANT: MUENSCHMANN, SABINA  
; TITLE OF INVENTION: A PROTEIN THAT INTERACTS WITH LIPIDS AND  
; FILE REFERENCE: IOWA:045MO  
; CURRENT APPLICATION NUMBER: PCT/US03/19834  
; CURRENT FILING DATE: 2003-06-24  
; PRIOR APPLICATION NUMBER: 10/445,724  
; PRIOR FILING DATE: 2003-05-27  
; PRIOR APPLICATION NUMBER: 60/392,158  
; PRIOR FILING DATE: 2002-06-28  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: PatentIn Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 9401  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (342)..(9374)  
PCT-US03-19834-1

Query Match 86.7% Score 1786; DB 1; Length 9401;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;

QY 2 TGGCGCTATCAAGCGCTATGCGCAGACAGCAAGGGGCTTTTGGAGTCATATACCA 61  
| | | | |  
Db 3418 TGGCGCCATCAACGGCGTACCGCCAGACAGCAAGGGGCTCTTAGGGTCATATACCA 3477  
| | | | |  
QY 62 GCTTACCGGGCGGACAAAACAGAGTGAAGGTGAGGTGATCGTGTCAACTGCTG 121  
| | | | |  
Db 3478 GCTTACCGGGCGGACAAAACAGAGTGAAGGTGAGGTGATCGTGTCAACTGCTG 3537  
| | | | |  
QY 122 CCCAAGCTTCTTGGCAACCTGATTAACGGGGTGTGATGATCTTACATGAGAGCG 181  
| | | | |  
Db 3538 CCCAAGCTTCTTGGCAACCTGATTAACGGGGTGTGATGATCTTACATGAGAGCG 3597  
| | | | |  
QY 182 GAACAAGACATGTCGTACCTTAAGGGTCTGTATCCAGATGTAACAACAATGTGACC 241  
| | | | |  
Db 3598 GAACAAGACATGTCGTACCTTAAGGGTCTGTATCCAGATGTAACAACAATGTGACC 3657  
| | | | |  
QY 242 AAGACTCTGTAGGCTGGCCGCTCCCAAGGTGCGCGCTCAATTAACACCATGCTGGC 301  
| | | | |  
Db 3658 AAGACTCTGTAGGCTGGCCGCTCCCAAGGTGCGCGCTCAATTAACACCATGCTGGC 3717  
| | | | |  
QY 302 GCTCTCGGAGCTTTACCTGTACAGAGGACGCGGATGTCAATCTGTGCGCGAGCGG 361  
| | | | |

Db 3718 GCTCTCGGAGCTTTACCTGTGTACAGAGGACAGCGGATGTCAATCTCGTGCGCGGCGG 3777  
| | | | |  
QY 362 GTGATGAGAGGGGACAGCTGCTTTGCGCCCGGCTATCTTTACTTGAAGGCTCTGG 421  
| | | | |  
Db 3778 GTGATGAGAGGGGACAGCTGCTTTGCGCCCGGCTATCTTTACTTGAAGGCTCTGG 3837  
| | | | |  
QY 422 GAGGCGCTCTGTGTCGCGGACAGATGCGGTGAGATATTCAGAGCCGCGATGCA 481  
| | | | |  
Db 3838 GAGGCGCTCTGTGTCGCGGACAGATGCGGTGAGATATTCAGAGCCGCGATGCA 3897  
| | | | |  
QY 482 CCGGTGAGTGTGATGAGCGGTGATCTTATCCCGTGAAGAGCTTGAAGACCAATGAG 541  
| | | | |  
Db 3898 CCGGTGAGTGTGATGAGCGGTGATCTTATCCCGTGAAGAGCTTGAAGACCAATGAG 3957  
| | | | |  
QY 542 GGTCCCGGTGTCTCAACAACAATCTCTCCCAACAGAGTGTCCCAAGGCTACCAAGTG 601  
| | | | |  
Db 3958 GGTCCCGGTGTCTCAACAACAATCTCTCCCAACAGAGTGTGTCCCAAGGCTACCAAGTG 4017  
| | | | |  
QY 602 CCCACCTGATGCTCCACCGGACGCGTTAAGAGACCAAGGTCCCGGCGCATGCGAG 661  
| | | | |  
Db 4018 CTACCTTCATGTCTCCACAGGACGCGCAAAAGCATCAAGGTCCCGGCTGTATGAG 4077  
| | | | |  
QY 662 CTCAAGGCTAAGAGTGTGTCTCAACCCCTCGTGTCTGCAACATGGGCTTTGGTG 721  
| | | | |  
Db 4078 CTCAAGGCTAATAGGTGTGTGTCAACCCCTGTGTGTGCAACATGGGCTTTGGTG 4137  
| | | | |  
QY 722 CTTACATGTCCAGGCGCATGAGATTTATCTTACATCAAGATGTGGGTGAGACATTA 781  
| | | | |  
Db 4138 CTTACATGTCCAGGCGCATGAGATTTATCTTACATCAAGATGTGGGTGAGACATTA 4197  
| | | | |  
QY 782 CTACGTGGAGCGCGATCAAGTATTCACCTACGCGCAAGTTCCTTGCAGAGCGGAGTGT 841  
| | | | |  
Db 4198 CTACGTGGAGCGCGATCAAGTATTCACCTACGCGCAAGTTCCTTGCAGAGCGGAGTGT 4257  
| | | | |  
QY 842 CAGGGGTGTCTTATGACATAATTAATTGTGACAGATGCTCCAGATGTCACATCA 901  
| | | | |  
Db 4258 CAGGGGTGTCTTATGACATAATTAATTGTGACAGATGCTCCAGATGTCACATCA 4317  
| | | | |  
QY 902 TCTTGGGATTTGGCATGTCTCTTGAACCAAGAGACCGGGGGCGAGATGATGTGTC 961  
| | | | |  
Db 4318 TCTTGGGATTTGGCATGTCTCTTGAACCAAGAGACCGGGGGCGAGATGATGTGTC 4377  
| | | | |  
QY 962 TCGCACCGCTAACCCCTCGGGCTCCGTCATGTGCGCCATCTTACATCGAGAGGTTG 1021  
| | | | |  
Db 4378 TCGCACCGCTAACCCCTCGGGCTCCGTCATGTGCGCCATCTTACATCGAGAGGTTG 4437  
| | | | |  
QY 1022 CTCTGTCACTACCGGAGATGCCCTTTTATGCGAAGCTATTCCCTTGAAAGCATTA 1081  
| | | | |  
Db 4438 CTCTGTCACTACCGGAGATGCCCTTTTATGCGAAGCTATTCCCTTGAAAGCATTA 4497  
| | | | |  
QY 1082 AGGGGGGAGACATCTCATCTTGTGCACTCAAGAGAAAGTGTGCGAGACTCGCGCA 1141  
| | | | |  
Db 4498 AGGGGGGAGACATCTCATCTTGTGCACTCAAGAGAAAGTGTGCGAGACTCGCGCA 4557  
| | | | |  
QY 1142 AACTGTGTCGTTGGGCGCTCAATGCCGTCCTTACTACCGGGGCTTATGATGTGCTCA 1201  
| | | | |  
Db 4558 AACTGTGTCGTTGGGCGCTCAATGCCGTCCTTACTACCGGGGCTTATGATGTGCTCA 4617  
| | | | |  
QY 1202 TCCGACAGAGTGTGATCTGTGTGTCGCAACTGACGCGCTCATGACCGGCTTTACG 1261  
| | | | |  
Db 4618 TCCGACAGAGTGTGATCTGTGTGTCGCAACTGACGCGCTCATGACCGGCTTTACG 4677  
| | | | |  
QY 1262 GCGACTGTGATTCGGTATGATCTGCAACAAGTGTGTCAACCAAGAGTGTGACTGAGCC 1321  
| | | | |  
Db 4678 GCGACTGTGATTCGGTATGATCTGCAACAAGTGTGTGTGCAACCAAGAGTGTGACTGAGCC 4737  
| | | | |  
QY 1322 TTGACCTTACCTTCAACATGAGACATCAAGCTTCCCAAGATGCTGTCTCCGTAATGC 1381  
| | | | |  
Db 4738 TTGACCTTACCTTCAACATGAGACATCAAGCTTCCCAAGATGCTGTCTCCGTAATGC 4797  
| | | | |  
QY 1382 AACGTGCGGGTATGAGACTGTGAGAGGAGCAAGGATCTTACAGATTTGTGCAACCGGGG 1441  
| | | | |

Db 4798 AACGTCGGGGCAGAGCTGGCAGGGGAAAGCCAGACATCTACAGATTGTGTGACCCGGGG 4857  
Qy 1442 AGCGCTCTTCTGCGCATGTTTGACTGCTGTCTCTGCGAAGTGCATAGACGGGGTTGG 1501  
Db 4858 AGCGCCCTCCGCGCATGTTGACTGCTCGTCTCTGTAGATGTATAGCGAGCTGG 4917  
Qy 1502 CTGGTATAGCTTACGCCCGCGAGACCAAGTTAGCTAGACATATAGAACACC 1561  
Db 4918 CTGGTATAGCTACGCCCGCGAGACCAAGTTAGCTAGACATATAGAACACC 4977  
Qy 1562 CGGACCTTCCGCTGTGCGCAAGCATCTTGAATTTTGGAGGGCGCTTTTACGGGCTCA 1621  
Db 4978 CGGGGCTTCCGCTGTGCGCAAGCATCTTGAATTTTGGAGGGCGCTTTTACGGGCTCA 5037  
Qy 1622 CCCATATAGACCCCACTTCTTATCCCAAGAGAGTGGGAAAACTTCTCTATC 1681  
Db 5038 CTCATATATAGATCCCACTTCTTATCCCAAGAGAGTGGGAAAACTTCTCTATC 5097  
Qy 1682 TGGTAGCGTACCAAGCCAGTGTGCGCTAGAGCTCAAGCCCTCCCGCTGTGGAGC 1741  
Db 5098 TGGTAGCGTACCAAGCCAGTGTGCGCTAGAGCTCAAGCCCTCCCGCTGTGGAGC 5157  
Qy 1742 AGATGTGAAGTGTGATTCGTCTCAAGCCCACTCTCATGAGGCAACCTCTGTAT 1801  
Db 5158 AGATGTGAAGTGTGATTCGTCTCAAGCCCACTCTCATGAGGCAACCTCTGTAT 5217  
Qy 1802 ATAGACTGGGCGCTGTGCGCAAGTGAAGTCAAGCTGACCAAGTCAAGTATATCA 1861  
Db 5218 AAGACTGGGCGCTGTGCGCAAGTGAAGTCAAGCTGACCAAGTCAAGTATATCA 5277  
Qy 1862 TGAAGTATGTGCGCTGTGCGCAAGTGAAGTCAAGCTGAGTGTCTGTGGCGGG 1921  
Db 5278 TGAAGTATGTGCGCTGTGCGCAAGTGAAGTCAAGCTGAGTGTCTGTGGCGGG 5337  
Qy 1922 TTCTGGCTGCTTGGCGCGTATTTGCTTATCCACAGCTGCGTGTATATGATGAGA 1981  
Db 5338 TCTGCTGTGCTTGGCGCGTATTTGCTTATCCACAGCTGCGTGTATATGATGAGA 5397  
Qy 1982 TTGCTGTGCGGAAAGCGGCAATCATACCGACAGGGAAGTCTCTATCCGGAGTTGG 2041  
Db 5398 TGTCTGTGCGGAAAGCGGCAATCATACCGACAGGGAAGTCTCTATCCGAGATTGG 5457  
Qy 2042 ATGAATGAGAGTGTCT 2059  
Db 5458 ATGAGATGAGAGTGTCT 5475

RESULT 14  
US-10-445-724-1  
; Sequence 1, Application US/10445724  
; GENERAL INFORMATION:  
; APPLICANT: STRAPLETON, JACK T.  
; APPLICANT: WUENSCHMANN, SABINA  
; TITLE OF INVENTION: A PROTEIN THAT INTERACTS WITH LIPIDS AND  
; FILE REFERENCE: IOWA:045US  
; CURRENT APPLICATION NUMBER: US/10/445,724  
; CURRENT FILING DATE: 2003-05-27  
; PRIOR APPLICATION NUMBER: 60/392,158  
; NUMBER OF SEQ ID NOS: 3  
; SOFTWARE: Patentin Ver. 2.1  
; SEQ ID NO 1  
; LENGTH: 9401  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
; FEATURE:  
; NAME/KEY: CDS  
; LOCATION: (342)..(9374)  
US-10-445-724-1

Query Match 86.7%; Score 1786; DB 51; Length 9401;  
Best Local Similarity 91.7%; Pred. No. 0;

Matches 1888; Conservative 0; Mismatches 170; Indels 0; Gaps 0;  
Qy 2 TGGGCGCTATACAGGCGCTATGCCAGAGAAAGGGGCTTTTGGAGTCAATATCAACA 61  
Db 3418 TGGGCGCTATACAGGCGCTATGCCAGAGAAAGGGGCTTTTGGAGTCAATATCAACA 3477  
Qy 62 GCTTGAACGGGCGGAGAAAACAGTGAAGGCTTGAAGTGTGCAAGTGTGCAAGTGTG 121  
Db 3478 GCTTGAACGGGCGGAGAAAACAGTGAAGGCTTGAAGTGTGCAAGTGTGCAAGTGTG 3537  
Qy 122 CCCAGACTTCTTGGCAACTGCAATTAAGGGGTGTGATCTGTCTTACATGCAATGAGCCG 181  
Db 3538 CCCAAACCTTCTGCGCAAGTGAATCAATGAGGCTGTGATCTTACATGCAATGAGCCG 3597  
Qy 182 GAAAGAGACATGCGCTGCACTTAAGGGTCTGTATCAAGTGAACCAATGAGACC 241  
Db 3598 GAAAGAGACATGCGCTGCACTTAAGGGTCTGTATCAAGTGAACCAATGAGACC 3657  
Qy 242 AAGACTGTAGAGCTGCGCGCTCCCAAGGTGCGGCTATTAACCATGCACTTGGC 301  
Db 3658 AAGACTGTAGAGCTGCGCGCTCCCAAGGTGCGGCTATTAACCATGCACTTGGC 3717  
Qy 302 GCTCTCGGACCTTTACTGTGTCAAGAGCAGCCGATGTCTTGTGCGCGCAAGCG 361  
Db 3718 GCTCTCGGACCTTTACTGTGTCAAGAGCAGCCGATGTCTTGTGCGCGCAAGCG 3777  
Qy 362 GTGAAGAGAGGAGCGCTGCTTTGCGCGCGCTATCTTATCTTGAAGGCTCTGG 421  
Db 3778 GTGAAGAGAGGAGCGCTGCTTTGCGCGCGCTATCTTATCTTGAAGGCTCTGG 3837  
Qy 422 GAGGCGCTGTGCTGCGCGCGAGAGCAATGCGTGAAGTATCAAGCGCGGTATGCA 481  
Db 3838 GAGGCGCTGTGCTGCGCGCGAGAGCAATGCGTGAAGTATCAAGCGCGGTATGCA 3897  
Qy 482 CCCGTGAGTGAAGCGGTGAATTCATCTCCGTAAGAGCTTGAAGCAATGA 541  
Db 3898 CCCGTGAGTGAAGCGGTGAATTCATCTCCGTAAGAGCTTGAAGCAATGA 3957  
Qy 542 GGTCCCGGCTGTGCTCAAGCAATCTCTCCCAAGAGTGCAGAGCTCAAGTGG 601  
Db 3958 GGTCCCGGCTGTGCTCAAGCAATCTCTCTCCCAAGAGTGCAGAGCTCAAGTGG 4017  
Qy 602 CCCACTGATGCTCCACCGGAGCGGTGAAGAGCAAGGTCCCGGCGGATAGCGAG 661  
Db 4018 CCCACTGATGCTCCACCGGAGCGGTGAAGAGCAAGGTCCCGGCGGATAGCGAG 4077  
Qy 662 CTCAGGCTCAAGGTGCTGTCTCAACCCCTCGTGTGCTGCAACATGAGCTTGGTG 721  
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Qy 722 CTTAATGTCAGAGCGCATGAGTGAATCTTAATCAGAGCTGAGGAGTGAAGCAATTA 781  
Db 4138 CTTAATGTCAGAGCGCATGAGTGAATCTTAATCAGAGCTGAGGAGTGAAGCAATTA 4197  
Qy 782 CTACTGAGAGCCGATCAAGTATTCACCTTACGAGGATTCCTTCCGAGCGGCTGT 841  
Db 4198 CCACGAGAGCCGATCAAGTATTCACCTTACGAGGATTCCTTCCGAGCGGCTGT 4257  
Qy 842 CAGGGGCTCTTATGACATTAATTTGAGAGTGCACATCCACGAGTGAACATCA 901  
Db 4258 CAGGGGCTCTTATGACATTAATTTGAGAGTGCACATCCACGAGTGAACATCA 4317  
Qy 902 TCTTGGGATGAGCATGCTCTTGAACAGAGCAAGCGCGGCGGAGTCAAGTGTGC 961  
Db 4318 TCTTGGGATGAGCATGCTCTTGAACAGAGCAAGCGCGGCGGAGTCAAGTGTGC 4377  
Qy 962 TCGCACCGCTAACCCCTCCGCGCTGCTACATGTCGCCATCTTAACATGAGAGTTG 1021  
Db 4378 TCGCACCGCTAACCCCTCCGCGCTGCTACATGTCGCCATCTTAACATGAGAGTTG 4437  
Qy 1022 CTGTGTCACTACCGGAGAGATCCCTTTATGAGCAAGCTATTCCTTTGAAGCAATTA 1081  
Db 4438 CTGTGTCACTACCGGAGAGATCCCTTTATGAGCAAGCTATTCCTTTGAAGCAATTA 4497

1082 AGGGGGGGGAGCATCTCTTCTGCACTCAAGAGAGAGGAGCGAGCTGCGCGAA 1141  
4498 AGGGGGGGGAGCATCTCTTCTGCACTCAAGAGAGAGGAGCGAGCTGCGCGAA 4557  
1142 AACTGTGCGCGTGGGCGGTCAATGCGGTGCTTACCGCGCGCTTGTGTGCTCA 1201  
4558 AGCTGTGCGCATTTGGGCAATCAATGCGGTGCTTACCGCGCGCTTGTGTGCTCA 4617  
1202 TCCGCAAGTGTGTAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1261  
4618 TCCCAAGAGCGCGCATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4677  
1262 GCGACTTGTGATGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1321  
4678 GCGACTTGTGATGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4737  
1322 TTGACCTTACCTTCACTTGAAGATCAAGCTTCCCGAGAGTGTGTGTGTGTGTGT 1381  
4738 TTGACCTTACCTTCACTTGAAGATCAAGCTTCCCGAGAGTGTGTGTGTGTGTGT 4797  
1382 AACGTGCGGGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1441  
4798 AACGTGCGGGTGAAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4857  
1442 AGCGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1501  
4858 AGCGCTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4917  
1502 CTGGTATGAGCTTACGCGCGCGAGACCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1561  
4918 CTGGTATGAGCTTACGCGCGCGAGACCAAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 4977  
1562 CGGGAATTCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1621  
4978 CGGGAATTCGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5037  
1622 CCCAATGAGCGCGCATCTTCCATCCCAAGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1681  
5038 CCCAATGAGCGCGCATCTTCCATCCCAAGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5097  
1682 TGGTACGCTTACCAAGACCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1741  
5098 TGGTACGCTTACCAAGACCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5157  
1742 AGATGTGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1801  
5158 AGATGTGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5217  
1802 ATGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1861  
5218 ATGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5277  
1862 TGAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1921  
5278 TGAATGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5337  
1922 TTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1981  
5338 TTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5397  
1982 TTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2041  
5398 TTTGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5457  
2042 ATGAATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 2059  
5458 ATGAATGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 5475

RESULT 15  
US-08-403-590B-65  
Sequence 65, Application US/08403590B

GENERAL INFORMATION:  
APPLICANT: Chien, David Y.  
TITLE OF INVENTION: NANB Diagnostics and Vaccines  
NUMBER OF SEQUENCES: 777  
CORRESPONDENCE ADDRESS:  
ADDRESSEE: Chiron Corporation  
STREET: 4560 Horton Street  
CITY: Emeryville  
STATE: CA  
COUNTRY: USA  
ZIP: 94608-2916  
COMPUTER READABLE FORM:  
MEDIUM TYPE: Floppy disk  
COMPUTER: IBM PC compatible  
OPERATING SYSTEM: PC-DOS/MS-DOS  
SOFTWARE: PatentIn Release #1.0, Version #1.30  
CURRENT APPLICATION DATA:  
APPLICATION NUMBER: US/08/403,590B  
FILING DATE: 14-MAR-1995  
CLASSIFICATION: 424  
ATTORNEY/AGENT INFORMATION:  
NAME: Harbin, Alisa A.  
REGISTRATION NUMBER: 33,895  
REFERENCE/DOCKET NUMBER: 0110.002  
TELECOMMUNICATION INFORMATION:  
TELEPHONE: (508)359-3876  
FAX: (508)359-3885  
INFORMATION FOR SEQ ID NO: 65:  
SEQUENCE CHARACTERISTICS:  
LENGTH: 6785 base pairs  
TYPE: nucleic acid  
STRANDEDNESS: single  
TOPOLOGY: linear  
MOLECULE TYPE: cDNA  
FEATURE:  
NAME/KEY: CDS  
LOCATION: 3..6785  
US-08-403-590B-65  
Query Match 86.6%; Score 1784.4; DB 14; Length 6785;  
Best Local Similarity 91.7%; Pred. No. 0;  
Matches 1887; Conservative 0; Mismatches 171; Indels 0; Gaps 0;  
2 TGGCCCTTATCAAGCCCTATGCGCCGAGAGAGAGGCTTTGGAGTGCATTAATCAACA 61  
1204 TGGCCCTTATCAAGCCCTATGCGCCGAGAGAGAGGCTTTGGAGTGCATTAATCAACA 1263  
62 GCTTACCGCGCGGAGCAAAAAACAGGTGAGAGGTGATGATGATGATGATGATGATGATGAT 121  
1284 GCTTACCGCGCGGAGCAAAAAACAGGTGAGAGGTGATGATGATGATGATGATGATGATGAT 1323  
122 CCCAATGAGCGCGCATCTTCCATCCCAAGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 181  
1324 CCCAATGAGCGCGCATCTTCCATCCCAAGAGAGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1383  
132 GAAACAAGACATTCCTGCTCACTTAAGGCTCTGTATCAATGTATCAATGTATCAATGTATCA 241  
1384 GAAACAAGACATTCCTGCTCACTTAAGGCTCTGTATCAATGTATCAATGTATCAATGTATCA 1443  
242 AAGACCTGTGAGGCTGAGCGCGCTCCCAAGGTGCGGCTTAACACATGCACTTGGC 301  
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302 GCTCTGAGACCTTATCTGTGTCAAGAGCAAGCGATGTCAATTCCTGTGCGCGAGCGG 361  
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1564 GTGATGAGAGGAGGAGCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT 1623  
422 GAGGCCCTGTGCTGCGCCCGAGAGACATGCGGTGAGCATATTCAAGACCGCGGTATGCA 481

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Job time : 11529 secs



GenCore version 5.1.7  
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OM nucleic - nucleic search, using sw model

Run on: February 7, 2006, 20:21:37 ; Search time 437 Seconds  
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8830.487 Million cell updates/sec

Title: US-10-817-591-16

Perfect score: 2061

Sequence: 1 atggcgctatcacgcgcta.....atgaatggaagtgctgta 2061

Scoring table: IDENTITY\_NUC

Gapop 10.0 , Gapext 1.0

Searched: 3449518 seqs, 936177250 residues

Total number of hits satisfying chosen parameters: 6899036

Minimum DB seq length: 0

Maximum DB seq length: 200000000

Post-processing: Minimum Match 0%

Maximum Match 100%

Listing first 45 summaries

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Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

#### SUMMARIES

Result No.	Score	Query Match	Length	ID	Description
1	1765.2	85.6	9599	US-09-980-559A-67	Sequence 67, Appl
2	1765.2	85.6	9599	US-09-980-559B-67	Sequence 67, Appl
3	1765.2	85.6	9611	US-09-980-559A-3	Sequence 3, Appl
4	1765.2	85.6	9611	US-09-980-559A-5	Sequence 5, Appl
5	1765.2	85.6	9611	US-09-980-559A-7	Sequence 7, Appl
6	1765.2	85.6	9611	US-09-980-559A-9	Sequence 9, Appl
7	1765.2	85.6	9611	US-09-980-559B-3	Sequence 3, Appl
8	1765.2	85.6	9611	US-09-980-559B-5	Sequence 5, Appl
9	1765.2	85.6	9611	US-09-980-559B-7	Sequence 7, Appl
10	1765.2	85.6	9611	US-09-980-559B-9	Sequence 9, Appl
11	1727.8	83.8	10644	US-60-752-866-8	Sequence 8, Appl
12	1727.8	83.8	11509	US-60-752-866-2	Sequence 2, Appl
13	1727.8	83.8	11509	US-60-752-866-7	Sequence 7, Appl
14	1384.4	67.2	2844	US-10-559-431-1	Sequence 1, Appl
15	1384.4	67.2	2844	US-10-559-431-1	Sequence 1, Appl
16	1379.2	66.9	8638	US-10-686-835B-7	Sequence 7, Appl
17	1379.2	66.9	8638	US-10-686-835B-25	Sequence 25, Appl
18	1379.2	66.9	8638	US-10-686-835B-7	Sequence 7, Appl
19	1379.2	66.9	8638	US-10-686-835B-25	Sequence 25, Appl
20	1379.2	66.9	8638	US-10-686-835B-24	Sequence 24, Appl
21	1379.2	66.9	8638	US-10-686-835B-24	Sequence 24, Appl

22	1378.6	66.9	8639	US-10-686-835B-1	Sequence 1, Appl
23	1378.6	66.9	8639	US-10-686-835B-1	Sequence 1, Appl
24	1378.6	66.9	8639	US-10-686-835B-4	Sequence 4, Appl
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26	1378.2	66.9	8642	US-10-686-835B-2	Sequence 2, Appl
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29	1378	66.9	10653	US-60-752-866-6	Sequence 6, Appl
30	1378	66.9	11518	US-60-752-866-3	Sequence 3, Appl
31	1378	66.9	11518	US-60-752-866-4	Sequence 4, Appl
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36	1377	66.8	8648	US-10-686-835B-5	Sequence 5, Appl
37	1363.2	66.1	9595	US-10-535-047-19	Sequence 19, Appl
38	1360	66.0	9596	US-09-980-559A-69	Sequence 69, Appl
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40	1252	60.7	5676	US-11-131-901-5	Sequence 5, Appl
41	1179.8	57.2	1899	US-10-535-047-21	Sequence 21, Appl
42	1054.4	51.2	9711	US-09-980-559A-1	Sequence 1, Appl
43	1054.4	51.2	9711	US-09-980-559B-1	Sequence 1, Appl
44	451.6	21.9	546	US-11-131-901-3	Sequence 3, Appl
45	248.6	12.1	543	PCT-US05-35191-1	Sequence 1, Appl

#### ALIGNMENTS

RESULT 1

US-09-980-559A-67

Sequence 67, Application US/09980559A

GENERAL INFORMATION:

APPLICANT: Yanagi, Masayuki

APPLICANT: Emerson, Suzanne

APPLICANT: Buhk, Jens

APPLICANT: Purcell, Robert

TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C

TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C

FILE REFERENCE: NIH255.001NP

CURRENT APPLICATION NUMBER: US/09/980.559A

CURRENT FILING DATE: 2002-05-14

PRIOR APPLICATION NUMBER: PCT/US00/15446

PRIOR FILING DATE: 2000-06-02

PRIOR APPLICATION NUMBER: US 60/137,693

PRIOR FILING DATE: 1999-06-04

NUMBER OF SEQ ID NOS: 70

SOFTWARE: FASTSEQ for Windows Version 4.0

SEQ ID NO 67

LENGTH: 9599

TYPE: DNA

ORGANISM: Hepatitis C virus

US-09-980-559A-67

Query Match

Beat Local Similarity 91.1%

Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;

2 TGGCGCTATACGCGCTATGCGCGAGACAGAGGCGCTTTGGATGATATACCA 61

3418 TGGCGCGCTATACGCGCGCTATGCGCGAGACAGAGGCGCTTTGGATGATATACCA 3477

62 GCTTACCGCGCGCGAGACAGAGGCGCTTGGATGATATACCA 121

3478 GCTTACCGCGCGCGAGACAGAGGCGCTTGGATGATATACCA 3537

122 CCCAGACTTTTGGCACTGATTAACGAGGCTTGGATGATATACCA 181

3538 CCCAGACTTTTGGCACTGATTAACGAGGCTTGGATGATATACCA 3597

182 GAACAGAGCATTTGCTGATTAACGAGGCTTGGATGATATACCA 241

3598 GAACAGAGCATTTGCTGATTAACGAGGCTTGGATGATATACCA 3657

QY 242 AAGACTGTAGGCTGGCCCGCTCCCGAAGGTGCCGCTATTAAACACATGCACTTGG 301  
DB 3658 AAGACTGTGTGGAGCTGGCCCGCTCTCAAGGTTCGCGCTATTGACACCTTACTTGG 3717  
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DB 3718 GCTCCTCGGACCTTTACCTGTATCAAGAGCAGCCGATGTCAATTCGCGCGCCGCGAG 3777  
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QY 482 CCCGTGAGTGGCTAAGGCGGTGATCTTCATCCCGGTAGAGCTTTAGACAAACATGA 541  
DB 3898 CCCGTGAGTGGCTAAGGCGGTGATCTTCATCCGTGTGAGAACTAGGGAACAACATGA 3957  
QY 542 GGTCCCCGGTGTCTCAGACAACTCTCCCAACAGAGTGCCCAAGACTTCAAGTGG 601  
DB 3958 GATCCCGGTGTTCACGAGCAACTCTCTCCACAGCAGTGGCCCGAGGCTTCCAGTGG 4017  
QY 602 CCACCTGATGCTCCACCGGAGCGGTAGAGACCAAGGTCGCGGCGCATTCGCGAG 661  
DB 4018 CCACCTGATGCTCCACCGGAGCGGTAGAGACCAAGGTCGCGGCTGCTAGGACAG 4077  
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QY 1502 CTGTGTATGACTTACGCGCCCGAGACCAAGTATGAGCTACGACATATGAAACACC 1561  
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QY 1982 TTTGCTTGTCCGGAAGCGGCAATACCCGAGGGAAGTCCCTAACCGGGAGTTGG 2041  
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; APPLICANT: Emerson, Suzanne  
; APPLICANT: Bukh, Jens  
; APPLICANT: Purcell, Robert  
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C  
; TITLE OF INVENTION: VIRUSES OF GENOTYPE 2a AND USES THEREOF  
; FILE REFERENCE: NIH255.001NP  
; CURRENT APPLICATION NUMBER: US/09/980.559B  
; CURRENT FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: PCT/US00/15446  
; PRIOR FILING DATE: 2000-06-02  
; PRIOR APPLICATION NUMBER: US 60/137,693  
; NUMBER OF SEQ ID NOS: 70  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO 67

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; LENGTH: 9599
; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-09-980-559B-67

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Query Match	85.6%	Score 1765.2;	DB 5;	Length 9599;
Best Local Similarity	91.1%	Pred. No. 0;		
Matches 1875; Conservative	0;	Mismatches 183;	Indels 0;	Gaps 0

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QY	482	CCCGTGAGTGTGCTTAAGCGGTGACCTTCAATCCCGTAGAGCTTAAAGAACCATGA	541
Db	3898	CCCGTGAGTGTGCTTAAGCGGTGACCTTATCTGTGTGAGAACTTAAGAACCATGA	395
QY	542	GGTCCCGCGTGTCTCAACCACTCTCCCAACGACGTGCCCAAGACTACCAATGG	601
Db	3958	GATCCCCCGTGTCTCAACCACTCTCTCCACGACAGTGGCCCAAGCTTCCAGGTGG	401
QY	602	CCCACTGTCATGCTCCCAACCGGACGGGTAAAGACCAAGGTCCCGGCGCATACGCG	661
Db	4018	CCCACTGTCATGCTCCCAACCGGACGGGTAAAGACCAAGGTCCCGGCTGTGTAACGAG	4077
QY	662	CTCAGGGCTAACAGGTGTGTGTCTCAACCCCTCCGTTGTGTCACAAATGGGCTTTGGTG	721
Db	4078	CCCAAGGCTAACAGGTGTGTGTCTCAACCCCTCTGTGTGTGCAACGCTGGGCTTTGGTG	4133
QY	722	CTTACATGTCCAAAGGCCCATGAGATTGATCTCAATCAATGACATCTGGGTTGAGACAAATTA	781
Db	4138	CTTACATGTCCAAAGGCCCATGAGATTGATCTCAATCAATGACATCTGGGTTGAGACAAATTA	4197
QY	782	CTACTGAGGCGCATGCAAGTTCCTCACTACGGAAGTTCCTTGGCCGACCGCGGGGTGT	841
Db	4198	CCACTGGAGGCCCATGCAAGTTCCTCACTACGGAAGTTCCTTGGCCGACCGCGGGGTGT	425
QY	842	CAGGGGTGTATTATGACATTAATTTGTGACGATGTCCACTCCACGATGCAATATCCA	901
Db	4258	CAGAGGTGTATTATGACATTAATTTGTGACGATGTCCACTCCACGATGCAATATCCA	431
QY	902	TCTTGGGCAATGGACCTGTCTTTGACCAAGCAGAGACCGCGGGGCGAGACTGACTGTGC	961
Db	4318	TCTTGGGCAATGGACCTGTCTTTGACCAAGCAGAGACTGCGGGGCGAGACTGACTGTGC	4377

OY	962	TTGGCACCGCAACCCCTCCGGGCTCCGTCACCTGCGCCCATCTCAATCATGAGGAGTTG	1021
Db	4378	TTGGCACCTGCTAACCCCTCCGGGCTCCGTCACCTGCTCCCATCTCAATCATGAGGAGTTG	4437
OY	1022	CTCTGTCCACATCAACGGAGAGATCCCTTTTATGSCAAGAGCTATTCCCTTGAAACAAATTA	1081
Db	4438	CTCTGTCCACACCGGAGAGATCCCTTTTATGSCAAGAGCTATTCCCTTGAGGTGATCA	4497
OY	1082	AGGGGGGGAGACATCTCATCTTCTGCCATCTCAAGAAAGAGTGCAGAGCTCGCCGCA	1141
Db	4498	AGGGGGGGAGACATCTCATCTTCTGCCATCTCAAGAAAGAGTGCAGAGCTCGCCGCA	4557
OY	1142	AACGTGTGCGTTTGGGGGTCAATGCGGTGCTTATCTACCGCGGCTTGATGTGTCCGTA	1201
Db	4558	AGCTGTGTGCAATTTGGGATCAATTCGCGGTGCTATCTACCGCGGTCTTGATGTGTGTA	4617
OY	1202	TCCCGACCAAGTGTGATGAGTGTGCTGTGCGCAATGACGCGCTCATGACCGGCTTTACG	1261
Db	4618	TCCCGACCAAGGCGGAGATGTTGTGCTGTGTGACGAGTGTCTATATATGCTTTTACG	4677
OY	1262	GCGACTTGCATTGCGGTATAGACTGCAACAGTGTGTACCCAGACAGTGTGACTTCAGCC	1321
Db	4678	GCGACTTGCATTGTGTATAGACTGCAACAGTGTGTACCTACAGAGTGTGACTTCAGCC	4737
OY	1322	TTGACCCCTTACTTCAACATTAAGACAAATCACGCTTCCCGAGATGCTGTCTCCGTACTC	1381
Db	4738	TTGACCCCTTACTTATTAACATTAAGACAAACACGCTTCCCGAGATGCTGTCTCCAGACTC	4797
OY	1382	AAAGTCCGGGGATGAGACTGGCAGAGAGGAAAGCCAGGATCTTACAGATTTGTGCAACGGGGG	1441
Db	4798	AAAGTCCGGGGATGAGACTGGCAGAGAGGAAAGCCAGGATCTTATAGATTTGTGCAACGGGGG	4857
OY	1442	AGCGTCCCTTCTGGGATGTTTGACTGTCGTGCTCTGCGAGTGTCTATGACCGCGGTTGTG	1501
Db	4858	AGCGTCCCTTCTGGGATGTTTGACTGTCGTGCTCTGTAAGTGTCTATGACCGCGGTTGTG	4917
OY	1502	CTTGATATGAGCTTACGCGCGCGCGAGACACAGTTAGGCTTACGAGCATACATGAACACC	1561
Db	4918	CTTGATATGAGCTACACGCGCGCGCGAGACTACAGTTAGGCTTACGAGCTACATGAACACC	4977
OY	1562	CGGACATTTCCCGTGTGCAAGACCATCTGTGAATTTGGAGGGGCTTTTACGGGTCTCA	1621
Db	4978	CGGAGCTTCCCGTGTGCAAGACCATCTGTGAATTTGGAGGGGCTTTTACGGGCTCTCA	5037
OY	1622	CCCACTATGACGCGCCACTTCTATCCAGACAAAGACAGAGTGGGAAAACCTTCCCTATC	1681
Db	5038	CTCATATATGATGCCCATCTTTTATCCAGACAAAGACAGAGTGGGAAAACCTTCCCTATC	5097
OY	1682	TGTAGCGCTACCAAGCAACCGTGTGCGCTAGAGCTCAAGCCCTTCCCGCTGTGGAGCC	1741
Db	5098	TGTAGCGCTACCAAGCAACCGTGTGCGCTAGAGGCTCAAGCCCTTCCCGCATGTGGAGCC	5157
OY	1742	AGATGTGGAATGCTTGTATCCGTCTCAAGCCCAACCTTCATGCGGCCCAACACTCTGCTAT	1801
Db	5158	AGATGTGGAATGTTTATTCGCTTTAAACCAACCTTCATGCGGCCCAACACTCTGCTAT	5217
OY	1802	ATTAGACTGGGCGCTGTCCAGAAATGAGTCAACCTGACGACCCCAAGTCAACCAATATATCA	1861
Db	5218	ACAAGCTGGGCGCTGTTTCAAGATATAGTCAACCTGACGACCCCAATCAACCAATATATCA	5277
OY	1862	TGACATGATATGTCGGCTGACCTGAGAGTGTCTACAGATACCTGGGATCTGTGTCGGCGC	1921
Db	5278	TGACATGATATGTGGCGCGACCTGAGAGTGTCTACAGACACTGGGATCTGTGTCGGCGCG	5337
OY	1922	TTCTGTGCTGCTTTTGGCGCGATATGCTATTCACAGGCTGTGTGTCTATATAGTATAGTA	1981
Db	5338	TCTGTGCTGCTCTTGTGCGCGCTATATGCTGTCTCAACAGGCTGTGTGTCTATATAGTATAGTA	5397
OY	1982	TTGTCTTGTCTCGAAGAGCCGCAATTCATACCGACAGGAGTCTCTCAACCGGAGTTGCG	2041
Db	5398	TGTCTTGTCTCGGAGAGCCGCAATTTATCTGTACAGGAGGTTCTTATCCAGAGTTGCG	5457
OY	2042	ATGAATATGAAGTGTCT 2059	



Db	5110	TGTTAGCGCTACCAAGCCACCGCTGTGCGCTAAGGGCTCAAGCCCCCTCCCAATGATGAGAAC	5169
Qy	1742	AGATGTGGAAATGCTTGATTCGGTCTCAAGCCACCCCTTCATATGAGGACCAACCTCTGTCTAT	1801
Db	5170	AGATGTGGAAATGTTTGAATCCGCTTAAACCACTTCATATGAGGACCAACCCCTGCTAT	5229
Qy	1802	ATTAGACTGGGCGCTGTCCAGATGAATGCACTTCAGCAGCACCCAGTCCACCAATATCA	1861
Db	5230	ACAGACTGGGCGCTGTTTCAATATGAATGCACTTCAGCAGCACCCATATCCAAATATCA	5289
Qy	1862	TGACATGTATGTCCGCTGACCTGAGAGTGTGTACAGAGTACCTTGGGTGCTGTGGCGCG	1921
Db	5290	TGACATGTATGTCCGCGCGACCTGAGAGTGTGTACAGAGTACCTTGGGTGCTGTGGCGCG	5349
Qy	1922	TTTCTGGCTGCTTTTGCGCGCGTATTTGCTATCCACAGGCTGCTGTGTCTATTAAGTAA	1981
Db	5350	TCTCTGGCTGCTCTTGCGCGCGTATTTGCTATCCACAGGCTGCTGTGTCTATTAAGTAA	5409
Qy	1982	TTTGTCTTGTCCGGAAAGCGGCGCATATACCCGACAGGGAAGTCTCTTACCGGGAATTCG	2041
Db	5410	TCTGTCTTGTCCGGAAAGCGGCGCATATTAACCTGACAGGGAAGTCTCTTACCGGAATTCG	5469
Qy	2042	ATGAATGGAAAGATGCT 2059	
Db	5470	ATGAGATGGAAGATGCT 5487	

```

RESULT 4
US-09-980-559A-5
/ Sequence 5, Application US/09980559A
/ GENERAL INFORMATION:
/ APPLICANT: Yanagi, Masayuki
/ APPLICANT: Emerson, Suzanne
/ APPLICANT: Buhn, Jens
/ APPLICANT: Purcell, Robert
/ TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C
/ TITLE OF INVENTION: VIRUSES OF GENOTYPE 2a AND USES THEREOF
/ FILE REFERENCE: NIH255.001NP
/ CURRENT APPLICATION NUMBER: US/09/980.559A
/ CURRENT FILING DATE: 2002-05-14
/ PRIOR APPLICATION NUMBER: PCT/US00/15446
/ PRIOR FILING DATE: 2000-06-02
/ PRIOR APPLICATION NUMBER: US 60/137,693
/ PRIOR FILING DATE: 1999-06-04
/ NUMBER OF SEQ ID NOS: 70
/ SOFTWARE: FastSeq for Windows Version 4.0
/ SEQ ID NO 5
/ LENGTH: 9611
/ TYPE: DNA
/ ORGANISM: Hepatitis C virus
US-09-980-559A-5

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Query Match	85.6%	Score 1765.2;	DB 5;	Length 9611;
Best Local Similarity	91.1%;	Pred. No. 0;		
Matches 1875; Conservative	0;	Mismatches 183;	Indels 0;	Gaps 0;

Qy	2	1GGGCGCTTATCA	CGGCTTATG	CCCA	CGACGACAA	GGGGCCCTTTGGGATG	CATATCA	CCCA	61
Db	3430	TGGGGCCCATCA	CGGCTTACG	CCCA	CGACGACAA	GGGGCCCTCTTAGGGTGTATTAATCA	CCCA	3488	
Qy	62	GCTTGA	CCGGCCGGGACAA	AAAA	CAAGTGGAGGGGTA	GTTCAGATCGTGTCAATG	CGTG	121	
Db	3490	GCTGTACTGG	CCGGGACAA	AAAA	CAAGTGGAGGGTGA	GTTCAGATCGTGTCAATG	CGTG	3548	
Qy	122	CCCA	GACTTTCTTGGCAA	CTG	CATTAACGGGGTGTGTG	ACTGTCTACCA	TGAGCCG	181	
Db	3550	CCCA	AACCTTCTGTGGCAA	GTG	CAATGAGGATATGCTG	AGCTGTCTTACCA	CGGGGCG	3605	
Qy	182	GAC	ACAGACCA	TTTTCGTC	CACTTAAGGGTCTGT	TATCAATGATACCA	CAATG	241	
Db	3610	GAC	ACAGACCA	TTTCATCA	TCCCAAGGGTCTGT	GTATCAAGATGTATCA	CAATG	3665	

OY	242	AAAGACCTGTAGGCGTGGCCGCGCTCCCGCAAGGCGCCGCGCATTTACACACATGCACTTGGG	301
Db	3670	AAGACCTTGTGAGCGCGCCGCTCTCAAGGTTCCCGCTCATTTGACAACCTGTACTTGGG	3722
OY	302	GCTCCTCGGACCTTTACCTGTGTACAGAGGACGCGATGTCAATTCTGTGCGCGACGGG	361
Db	3730	GCTCCTCGGACCTTTACCTGTGTACAGAGGACGCGGATGTCAATTCTGTGCGCGCGGCGAG	378
OY	362	GTCATGCGAGGAGGACGCTGTTCGCCCCGAGCCTATCTTTACTTTGAAAGGCTCTCGG	421
Db	3790	GTGATAGGAGGGGTAGCTGTGCTTCGCCCCGAGCCTATCTTTACTTTGAAAGGCTCTCGG	3841
OY	422	GAGGCGCTCTGTGTGCCCCCGCAGGACATGCGGTGAGCATATTGACACCGCGGTATGCA	481
Db	3850	GAGGCGCTCTGTGTGCCCCCGCAGGACATGCGGTGAGCATATTGACACCGCGGTGATGCA	3901
OY	482	CCCGTGTAGGTAGGCTTAAGGCGGTGTGACTTATCCCGGTAGAGGCTTTAGAGACATCATGA	541
Db	3910	CCCGTGTAGGTAGGCTTAAGGCGGTGTGACTTATTCCTGTGTAGAGACCTTAGGACATACATTA	396
OY	542	GGTCCCCGGTGTCTCAGACAACTTCCTCCCAACGAGTGTGCCGAGAGCTACCAAGTGG	601
Db	3970	GATCCCGGTGTTCAGCGAACACTCTCTCCACAGCAGTGTGCCGAGAGCTTCAAGGTGG	402
OY	602	CCCACTGTGCATGTCTCCACCGGACGCGGTAAAGACCAAGGTCCCGGCGCGATATACGACG	661
Db	4030	CCCACTGTGCATGTCTCCACCGGACGCGGTAAAGACCAAGGTCCCGGCTGTGTACGCGAG	408
OY	662	CTCAGGGGCTACAAAGGTGTGTGGTGTCAACCCCTCGGTGTGTCAACAATGGGCTTTGGTG	721
Db	4090	CCCAAGGCTTACAAAGGTGTGTGGTGTCAACCCCTCTGTGTGTGTCAACGCTGGGCTTTGGTG	414
OY	722	CTTACATGTCCAAAGGCCCATGGGATTTGATTCCTAACATCAGGACTGTGGGTGAGGACAAATTA	781
Db	4150	CTTACATGTTCAAAGGCCCATGGGGTGTGATTCCTAACATCAGGACGCGGGGTGAGGACAAATTA	420
OY	782	CTTACTGTGAGCCCGCATCACTGATTTCCACTTACGGGCAAGTTCTTGTCCGACGCGGGGTGT	841
Db	4210	CCACTGTGAGCCCGCATCACTGATTTCCACTTACGGGCAAGTTCTTGTCCGACGCGGGGTGTCT	426
OY	842	CAGGGGGGCTTAATGACATTAATTTGTGTGACATGTGCACCTCCACGGATGTGACATTCGA	901
Db	4270	CAGGAGGTGCTTAATGACATTAATTTGTGTGACATGTGCACCTCCACGGATGTGCACATTCGA	432
OY	902	TCTTGTGGCATTTGTGCACTGTCTCTTGTGACCAAGGAGAGACCGCGGGGCGAGACTGACTGTGC	961
Db	4330	TCTTGTGGCATTTGTGCACTGTCTCTTGTGACCAAGGAGAGACTGTGGGGGCGAGACTGTGTGTGC	438
OY	962	TGCGCACCGTACCCCTTCGCGGCTTCGTGTCACTGTGTGCCCATTCCTAACATCGAGAGGTTG	102
Db	4390	TGCGCACCTGTACCCCTTCGCGGCTTCGTGTCACTGTGTGCCCATTCCTAACATCGAGAGGTTG	444
OY	1022	CTTGTGTCCACTACCGGAGAGATCCCGCTTTTATGTGGAAGGCTATTCCCTTGTGAAGCAATTA	108
Db	4450	CTTGTGTCCACACCGGAGAGATCCCGCTTTTATGTGGAAGGCTATTCCCGCTGTGTGTATCA	450
OY	1082	AGGGGGGGGAGACATCTCATCTTCTGTGCACTCAAAAGAAAGTGTGCGACGACTCGGCGCAA	114
Db	4510	AGGGGGGGGAGACATCTCATCTTCTGTGCACTCAAAAGAAAGTGTGCGACGACTCGGCGCAA	456
OY	1142	AACGTGTGCGTGTGGCGTCAATGTCCGTGTACTTACCGCGGCGCTTGTATGTGTCCGTCA	120
Db	4570	AGCTGTGTGCAATTTGGGCAATCATGTGCGTGTACTTACCGCGGTCTTGTACGTGTGTGTCA	462
OY	1202	TCCCGACCAATGTGTGACGTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	126
Db	4630	TCCCGACCAAGGGGGAATTTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	468
OY	1262	GCGACTTGATTTGCGGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	132
Db	4690	GCGACTTGATCTCTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGTGT	474
OY	1322	TTGACCCCTTACCACTTGTGAGCAATTCACGCTTTCGCCAGATGTGTCTTCCGATCTC	138

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Db      4750 TTGACCTTACCTTTACCATTTGAGACAAACACGCTCCCAAGATGCTGCTCAGAGACTC 4809
Qy      1382 AACGCTGGGGGTAGACTGGCAGAGGGAACCGAGCATCTACAGATTGTCAGCCGGGG 1441
Db      4810 AACGCGGGGGCAGGACTGGCAGGGGGAACCGAGCATCTATGATTGTCAGCCGGGG 4869
Qy      1442 AGCGCTCTCTGCGCATGTTGACTGCTGCTCTGCTGCGAGTGTATGACGGGGGTTGG 1501
Db      4870 AGCGCCCTTCGCGCATGTTGACTGCTGCTCTGCTGATGCTATGACGGGGCTGTG 4929
Qy      1502 CTGATGATGAGCTTACGCGCGCGAGACCAAGTTAGGCTACAGCATACATGAACCC 1561
Db      4930 CTGATGATGAGCTCAGCGCCGCGAGACTACAGTTAGGCTACAGAGGCTACATGAACCC 4989
Qy      1562 CGGAGCTTCCGCTGTGTCAGAGACATCTTGAATTTTGGAGGGCGCTTTACGGGCTCA 1621
Db      4990 CGGGGCTTCCGCTGTGTCAGAGACATCTTGAATTTTGGAGGGCGCTTTACGGGCTCA 5049
Qy      1622 CCCACATGAGCGCCACTTCTATCCAGACAAAGAGAGTGGGGAAACCTTCCCTATC 1681
Db      5050 CTCATATATAGTCCCATTTTATCCAGACAAAGAGAGTGGGGAAACCTTCTTAC 5109
Qy      1682 TGGTAGCTACCAAGCCAGCTGTGCTGCTAGAGCTCAAGCCCTCCCGCTGTGGAGC 1741
Db      5110 TGGTAGCTACCAAGCCAGCTGTGCTGCTAGAGGCTCAAGCCCTCCCGCATGTGGAGC 5169
Qy      1742 AGATGGAAGTGTGATTCCTCTCAAGCCACCTTCATGGGCCAACACTCTGCTAT 1801
Db      5170 AATATGGAAGTGTGATTCCTCTCAAGCCACCTTCATGGGCCAACAACCTCTGCTAT 5229
Qy      1802 ATAGATGGGCGCTGTCCAGAAATGAAGTCAACCTGACGACCCAGTCAACATATATCA 1861
Db      5230 ACGAGTGGGCGCTGTCCAGAAATGAAGTCAACCTGACGACCCAGTCAACATATATCA 5289
Qy      1862 TGAATATGATGTGAGCTGACCTGAGAGTGTCAAGATCTGAGTGTCTGTTGGGCGG 1921
Db      5290 TGAATATGATGTGAGCTGAGCTGAGAGTGTCAAGATCTGAGTGTCTGTTGGGCGG 5349
Qy      1922 TTTGCTGCTGTTGGCGGGGTATGCTTATCCAGAGGCTGCTGTGATATGATGATGA 1981
Db      5350 TCTGCTGCTGCTGCGCGGATATGCTGTCAACAGGCTGCGGTGCTATATGAGGAGGA 5409
Qy      1982 TTTGCTGCTGCGGAAAGCGGGAATCATACCGACAGGGAAGCTCTACCGGGAGTTGG 2041
Db      5410 TGGTCTGCTGCGGAAAGCGGGAATCATACCGACAGGGAAGTTCTTACAGAGAGTTGG 5469
Qy      2042 ATGAAATGGAAGTGTCT 2059
Db      5470 ATGAGATGGAAGTGTCT 5487

RESULT 5
US-09-980-559A-7
; Sequence 7, Application US/09980559A
; GENERAL INFORMATION:
; APPLICANT: Yanagi, Masayuki
; APPLICANT: Emerson, Suzanne
; APPLICANT: Buhk, Jens
; APPLICANT: Purcell, Robert
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C
; FILE REFERENCE: NIH25.001NP
; CURRENT APPLICATION NUMBER: US/09/980,559A
; CURRENT FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: PCT/US00/15446
; PRIOR FILING DATE: 2000-06-02
; PRIOR APPLICATION NUMBER: US 60/137,693
; PRIOR FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: FaastSeq for Windows Version 4.0
; SEQ ID NO 7
; LENGTH: 9611

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; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-09-980-559A-7
Query Match      85.6%; Score 1765.2; DB 5; Length 9611;
Best Local Similarity 91.1%; Pred. No. 0;
Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;

Qy      2 TGGGCGCATATACGGGCTATGCGCCAGAGACAAAGGGGCTTTGGAGTGCATATACCA 61
Db      3430 TGGGCGCATATACGGGCTATGCGCCAGAGACAAAGGGGCTTTGGAGTGCATATACCA 3489
Qy      62 GCTTACCGGCGCGGACAAAACAGGTGAGAGGTGAGATTGATTCGATCTGCTG 121
Db      3490 GCTTACCGGCGGACAAAACAGGTGAGAGGTGAGATTGATTCGATCTGCTG 3549
Qy      122 CCCAGACTTTCTTGGCAACTGTATTAACGGGGTGTGTTGACTGTCTACATGAGCCG 181
Db      3550 CCCAAACCTTCCGCAACGTGATCAATGAGGGTATGCTGACTGTCTACACGGGGCGG 3609
Qy      182 GAACAAAGACATGCGTACCTTAAGGGTCCGTGTTATCAAGTATCAACAAATGAGACC 241
Db      3610 GAACAAAGACATGCGTACCTTAAGGGTCCGTGTTATCAAGTATCAACAAATGAGACC 3669
Qy      242 AAGACTGTAGAGTGGCCCGCTCCCAAGGTGCGGCTATTAACACCATGCACTTGGC 301
Db      3670 AAGACTGTAGAGTGGCCCGCTCCCAAGGTGCGGCTATTAACACCATGCACTTGGC 3729
Qy      302 GCTCTGAGACCTTTTACCTGTGACAGAGGCAAGCCGATGTCAATTCCTGTGCGCCAG 361
Db      3730 GCTCTGAGACCTTTTACCTGTGACAGAGGCAAGCCGATGTCAATTCCTGTGCGCCAG 3789
Qy      362 GTGATGGAGGGGGGCGCTGCTTTCGCCCGGCTATCTTACTTGAAGGCTCCTGG 421
Db      3790 GTGATGGAGGGGGGCGCTGCTTTCGCCCGGCTATCTTACTTGAAGGCTCCTGG 3849
Qy      422 GAGGCTCTGTGTCGCGCCGAGAGCATGCGTATGAGATATTCAGAGCGGCTATGCA 481
Db      3850 GAGGCTCTGTGTCGCGCCGAGAGCATGCGTATGAGATATTCAGAGCGGCTATGCA 3909
Qy      482 CCGTGAAGTGGCTTAAGCGGCTGATCTTCAATCCCGTATGAGAGCTTATGAGACCAATGA 541
Db      3910 CCGTGAAGTGGCTTAAGCGGCTGATCTTCAATCCCGTATGAGAGCTTATGAGACCAATGA 3969
Qy      542 GGTCCCGGCTGTTCCAGACAACTCTCCCAAGAGAGTGGCCGAGCTACCAAGTGG 601
Db      3970 GATCCCGGCTGTTCCAGACAACTCTCTCCCAAGAGAGTGGCCGAGCTTCAAGTGG 4029
Qy      602 CCACTGCTATGCTCCACCGGCAAGGTAAGAGACCAAGGTCCCGGCGATACGAG 661
Db      4030 CCACTGCTATGCTCCACCGGCAAGGTAAGAGACCAAGGTCCCGGCTGCTACGAG 4089
Qy      662 CTCAGGGCTACAGGCTGCTGTCTCAACCCCTCGTGTCTGCAACATGGGCTTTGGTG 721
Db      4090 CTCAGGGCTACAGGCTGCTGTCTCAACCCCTCGTGTCTGCAACATGGGCTTTGGTG 4149
Qy      722 CTATATGTCGAAGGCGCATGGGATTGATCTTCAATCAAGATCAAGTGGGTAAGCAATTA 781
Db      4150 CTATATGTCGAAGGCGCATGGGATTGATCTTCAATCAAGATCAAGTGGGTAAGCAATTA 4209
Qy      782 CTACTGAGAGCCGATCAAGTATTCACCTACGGAAGTTCCTTCCGACGGGCTGT 841
Db      4210 CCACTGAGAGCCGATCAAGTATTCACCTACGGAAGTTCCTTCCGACGGGCTGT 4269
Qy      842 CAGGGGCTGCTTATGATATTAATTTGTGACGAGTGCATCTCCAGATGCAATCCA 901
Db      4270 CAGGGGCTGCTTATGATATTAATTTGTGACGAGTGCATCTCCAGATGCAATCCA 4329
Qy      902 TCTTGGGATGGGACCTGCTTGTGACCAAGAGACCGCGGGGCGAGACTGATGCTGC 961
Db      4330 TCTTGGGATGGGACCTGCTTGTGACCAAGAGACCTGCGGGGCGAGACTGATGCTGC 4389
Qy      962 TCGCCACCGCTACCCCTCGGGCTCCGTACATGTGCCCATCTTAATGAGAGGTTG 1021

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Db	4390	TCGCACTGCTACCCCTCCGGGCTCCGTCATGTGTCCCATCTTAATCGAAGAGTTG	4449
Oy	1022	CTGTGTCCACTACCGGAGAGATCCCCTTTTATGCGAAGGCTATTCCCCTTGAAACAATTA	1081
Db	4450	CTGTGTCCACACCGGAGAGATCCCTTTTACGGCAAGGCTATCCCTCCAGATGATCA	4509
Oy	1082	AGGGGGGGAGACATCTCACTCTTCTTGCCACTCAAGAAAGAAAGTGGACGAGTCCCGGCA	1141
Db	4510	AGGGGGGAGACATCTCACTCTTCTTGCCACTCAAGAAAGAAAGTGGACGAGTCCCGGCA	4569
Oy	1142	AACTGTGTGCGCTTGGGCGCTCAATGCGCGGCTTCTACTACGGGCGCTTGATGTCTCCGTA	1201
Db	4570	AGCTGTGTGCAATTGGGCATCAATGCCGTGCGCTACTACGGGCGCTTGATGTCTCCGTA	4629
Oy	1202	TCCGGAACGAGTGTGACGTTGTGCTGTGCGAATGACGCGCTCATAAGACCGGCTTTAACG	1261
Db	4630	TCCGGAACGAGGCGCATGTGTGTGCGTGTGCGACGAGATGCTCTATGACTGGCTTTAACG	4689
Oy	1262	GCGACTTGTGATTCGGTGAATAGACTGCAACAGTGTGTCAACCCAGACAGTGCATTTACGC	1321
Db	4690	GCGACTTGTGATTCGGTGAATAGACTGCAACAGTGTGTCAACAGTGTGTCAATTTACGC	4749
Oy	1322	TTGACCCCTACCTTCACTTGAAGACAATCAAGCTTCCCAGAGAGCTGTCTCCGTACTC	1381
Db	4750	TTGACCCCTACCTTCACTTGAAGACAATCAAGCTTCCCAGAGAGCTGTCTCTCAAGACTC	4809
Oy	1382	AACGTCCGGGGTAGACCTGCGAGAGGGAAGCCAGGATCTACAGATTGTGCAACCGGGG	1441
Db	4810	AACGCGGGGGAGAGACTGGCAGGGGGAAGCCAGGATCTTAAGATTGTGCAACCGGGG	4869
Oy	1442	AGCCTCTTCTGGCATGTTTGAATCTGTCTGTCTCTGCGAGTGCTATGACCGGGTGTG	1501
Db	4870	AGCGCCCTCCGGCATGTTTGAATCTGTCTGTCTCTGCGAGTGCTATGACCGGGGCTGTG	4929
Oy	1502	CTTGGTATGACCTTAACGCGCGCCGAGACAACAGTTAGGCTTAGAGCATATGAACCC	1561
Db	4930	CTTGGTATGACCTTAACGCGCGCCGAGACTCAAGTTAGGCTTAGAGCATATGAACCC	4989
Oy	1562	CGGGACTCCCGTGTGCCAACAACATCTTGAAATTTTGGAGGGGCGTCTTACGGGCTCA	1621
Db	4990	CGGGGCTTCCCGTGTGCCAAGACCATCTTGAAATTTTGGAGGGGCGTCTTACGGGCTCA	5049
Oy	1622	CCCAATAGACGCCCACTTCTTATCCAGACAAGACAGATGGGAAAACTTCTCTATC	1681
Db	5050	CTCATATATGATGCCCACTTTTATCTCCAGACAAGACAGATGGGGAAGAACTTCTCTATC	5109
Oy	1682	TGCTAGCCTACCAAGCCAACGCTGTGCCCTAAGAGTCAAGGCCCTTCCCGTGTGGACC	1741
Db	5110	TGCTAGCCTACCAAGCCAACGCTGTGCCCTAAGAGTCAAGGCCCTTCCCGTGTGGACC	5169
Oy	1742	AGATGTGGAAGTGTGATTCGGTCTCAAGGCCCAACCTCATGGGCAACCTCTGCTAT	1801
Db	5170	AGATGTGGAAGTGTGATTCGGCTTAAACCAACCTCTCATGGGCAACCTCTGCTAT	5229
Oy	1802	ATAGACTGGGCGCTGTCCAGATGAAGTCACTCTGACGCAACCCAGTCAACCAATATATCA	1861
Db	5230	ACAGACTGGGCGCTGTCCAGATGAAGTCAACCTCTGACGCAACCCAGTCAACCAATATATCA	5289
Oy	1862	TGACATGTATGTCCGCTGACCTGGAAGTGTCTACAGATTAAGTGGTGTCTGTGGCGCG	1921
Db	5290	TGACATGTATGTCCGCTGACCTGGAAGTGTCTACAGATTAAGTGGTGTCTGTGGCGCG	5349
Oy	1922	TTTGGGCTGCTTTGGCGCGGATATAGCCTATCAACAGGCTGTGGTGTATAGAGGTAGA	1981
Db	5350	TTCTGGCTGCTTTGGCGCGGATATAGCCTGTCAACAGGCTGTGGTGTATAGAGGTAGA	5409
Oy	1982	TTGTCTTGTCCGGAAGCCGGCAATCATACCGACAGGGAAGTCTCTACCGGAGTTG	2041
Db	5410	TCGTCTTGTCCGGAAGCCGGCAATTAATACCGACAGGAGGTTCTTACCGAGGTTG	5469
Oy	2042	ATGAATATGAAGATGCTT 2059	

Db	5470	ATGAGATGGAAGAGTGCT	5487
	RESULT 6		
	US-09-980-559A-9		
	Sequence 9, Application US/09980559A		
	GENERAL INFORMATION:		
	APPLICANT: Yanagi, Masayuki		
	APPLICANT: Emerson, Suzanne		
	APPLICANT: Buhk, Jens		
	APPLICANT: Purcell, Robert		
	TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C		
	TITLE OF INVENTION: VIRUSES OF GENOTYPE 2a AND USES THEREOF		
	FILE REFERENCE: NIH25.001NP		
	CURRENT APPLICATION NUMBER: US/09/980,559A		
	CURRENT FILING DATE: 2002-05-14		
	PRIOR APPLICATION NUMBER: PCT/US00/15446		
	PRIOR FILING DATE: 2000-06-02		
	PRIOR APPLICATION NUMBER: US 60/137,693		
	PRIOR FILING DATE: 1999-06-04		
	NUMBER OF SEQ ID NOS: 70		
	SOFTWARE: FastSeq for Windows Version 4.0		
	SEQ ID NO 9		
	LENGTH: 9611		
	TYPE: DNA		
	ORGANISM: Hepatitis C virus		
	US-09-980-559A-9		
	Query Match	85.6%; Score 1765.2; DB 5; Length 9611;	
	Best Local Similarity	91.1%; Pred. No. 0;	
	Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;		
QY	2	TGGGCGCTATCAGGCGCTTAGCCAGACAGACAGAGGCGCTTTGGATGCAATACCA	61
DB	3430	TGGGCGCCATCAGCGGCCTAGCCGACAGACAGAGGCGCTTCTAGGATGTAATACCA	3489
QY	62	GCTTGACCGCGCGGAGCAAAAACAGGTGAGGGGTGAGGTTCAATGTGTCACTGCTG	121
DB	3490	GCCGTGACTGCGCGGAGCAAAAACAGGTGAGGGGTGAGGTTCAATGTGTCACTGCTA	3549
QY	122	CCGAGACTTCTTGGCAACCTGCAATTAACGGGGGTGTGTGGACTGTCAACCATGAGCGG	181
DB	3550	CCCAACCTTCTTGGCAACCTGCAATTAACGGGGGTGTGTGGACTGTCTACACCGGGCGG	3609
QY	182	GAACAAGACCAATTGCGTCACTTAAGGGTCTGTATTCAGATGTACCAACAATGTGAC	241
DB	3610	GAAGAAGACCAATGCAATCAACCAAGGGTCTGTATTCAGATGTATACCAATGTGAC	3659
QY	242	AAGACTCTGTAGGCTGGCGCGCTCCCAAGGTGCGCGCTATTAAACATGACCTTGG	301
DB	3670	AAGACTCTGTAGGCTGGCGCGCTCCCAAGGGTCTGTATTAACACCTGTACTTGG	3729
QY	302	GCTCCTGGGACCTTACCTGTGTCAAGAGGACGCGCGAATGTCATTCTGTGGCGCGAGCGG	361
DB	3730	GCTCCTGGGACCTTACCTGTGTCAAGAGGACGCGCGAATGTCATTCTGTGGCGCGAGCGG	3789
QY	362	GTGATGAGGAGGAGGAGCTGTCTTTCGCGCGCGCTATCTTACTTGAAGAGCTCTCGG	421
DB	3790	GTGATGAGGAGGAGGAGCTGTCTTTCGCGCGCGCTATCTTACTTGAAGAGCTCTCGG	3849
QY	422	GAGGCGCTCTGTGTGCGCGCGAGACATGCGGTGAGCATATTAGAGCGCGGTATGCA	481
DB	3850	GAGGCGCTCTGTGTGCGCGCGAGACATGCGGTGAGCATATTAGAGCGCGGTATGCA	3909
QY	482	CCCGTGAAGGTGAGGCGGTGAGCATTTCCCGGTGAGAGGCTTGAAGCAACATGA	541
DB	3910	CCCGTGAAGGTGAGGCGGTGAGCATTTCCCGGTGAGAGGCTTGAAGCAACATGA	3969
QY	542	GATCCCGCGGTGTTCTCAGACAACTCTTCCCAACAGAGTGCCCAAGATCAACGAATGG	601
DB	3970	GATCCCGCGGTGTTCTCAGACAACTCTTCCCAACAGAGTGCCCAAGATCAACGAATGG	4029
QY	602	CCCACTTGATCTTCCACCGGAGCGGTGAAGACCAAGGTCCCGCGCATACGAG	661

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Db 4030 CCCACCTGATGCTCCACCGGAGGGTAAGAGCAACAAGTCCGGCTGGGTAGCGAG 4089
Qy 662 CTCAGGGCTTAAGAGTGTGTGTCTCAACCCCTCCCTGTGTGCAACAATGGGCTTTGGTG 721
Db 4090 CCCAGGGCTTAAGAGTGTGTGTCTCAACCCCTCTGTGTGTGCAAGCGTGGGCTTTGGTG 4149
Qy 722 CTTCATGTCTCAAGGCCCATGGGATTGATCTTAACATCAAGGATGGGGTGAAGCAATTA 781
Db 4150 CTTCATGTCTCAAGGCCCATGGGATTGATCTTAATCAAGAGCGGGGTGAAGCAATTA 4209
Qy 782 CTACTGGAGCCCGATCAGGTATTCACCTACCGCAAGTTCTTGGCGAGCGGCGGTGT 841
Db 4210 CCACCTGGAGCCCGATCAGGTATTCACCTACCGCAAGTTCTTGGCGAGCGGCGGTGT 4269
Qy 842 CAGGGGGTCTTAATGACATTAATTTTGAAGAGTCCACTTCAGAGTGAACATCCA 901
Db 4270 CAGGAGGTCTTAATGACATTAATTTTGAAGAGTCCACTTCAGAGTGAACATCCA 4329
Qy 902 TCTTGGGCAATGGCACTGTCTTGAACCAAGAGAGACCGGGGGGAGAGTGAAGTGTG 961
Db 4330 TCTTGGGCAATGGCACTGTCTTGAACCAAGAGAGTGGGGGGGAGAGTGTGTG 4389
Qy 962 TCGCCACCGCTACCCCTCGGGCTCCGTCACTGTGCGCACTCTTAACATGAAGAGTGTG 1021
Db 4390 TCGCCACTGTACCCCTCGGGCTCCGTCACTGTGTCCATCTTAACATGAAGAGTGTG 4449
Qy 1022 CTCTGTCCACTACCGAGAGATCCCTTTATGGCAAGGCTATCCCTTTGAAGCAATTA 1081
Db 4450 CTCTGTCCACTACCGAGAGATCCCTTTATGGCAAGGCTATCCCTTTGAAGTATCA 4509
Qy 1082 AGGGGGGAGACATCTCATCTTGTGCACTCAAGAGAGAGTGCAGAGTGCAGCGCA 1141
Db 4510 AGGGGGGAGACATCTCATCTTGTGCACTCAAGAGAGAGTGCAGAGTGCAGCGCA 4569
Qy 1142 AACTGTGCGGTGTGGCGTCAATGCGGTGCTTACTACCGCGCTTGAATGTGTCCGTCA 1201
Db 4570 AGTGTGCGGTGTGGCGTCAATGCGGTGCTTACTACCGCGCTTGAATGTGTCCGTCA 4629
Qy 1202 TCCCGACAGTGTGACGTTGTGTGTGTGCAACTGAAGCGCTCATGACCGGCTTTACCG 1261
Db 4630 TCCCGACAGTGTGACGTTGTGTGTGTGCAACTGAAGTGTCTCATGACGTTACCG 4689
Qy 1262 GGGACTTGAATGGGTGATGATGACGACGAGTGTGACCCGAGAGTGTGACTTGAGCC 1321
Db 4690 GGGACTTGAATGGGTGATGATGACGAGTGTGTGCTCACTGACAGAGTGTGACTTGAGCC 4749
Qy 1322 TTGACCTTACCTTACCATTTGAGACATCAGCTTCCCGAGAGTGTGTCTCCGTATCTC 1381
Db 4750 TTGACCTTACCTTACCATTTGAGACATCAGCTTCCCGAGAGTGTGTCTCCAGAGATCTC 4809
Qy 1382 AACGTGGGGTGAAGACTGGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 1441
Db 4810 AACGTGGGGTGAAGACTGGGAGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGGAGG 4869
Qy 1442 AGGCTCTTCTGGCATGTTTGACTGCTGTCTCTGCGAGTGTGCTTAAGCGGGGTTGG 1501
Db 4870 AGGCTCTTCTGGCATGTTTGACTGCTGTCTCTGCTGTGAGTGTGCTTAAGCGGGGTTGG 4929
Qy 1502 CTGTGATGAGCTTAAGCGCGCGAGAGCAACAGTTAGGCTACGAGAGTATCATGAACACC 1561
Db 4930 CTGTGATGAGCTTAAGCGCGCGAGAGCAACAGTTAGGCTACGAGAGTATCATGAACACC 4989
Qy 1562 CCGGACTTCCCGTGTGTGCAAGACCATCTTGAATTTTGGAGGGCGTCTTTACGGGTCTCA 1621
Db 4990 CCGGACTTCCCGTGTGTGCAAGACCATCTTGAATTTTGGAGGGCGTCTTTACGGGTCTCA 5049
Qy 1622 CCACATGAGCGGCACTTCTTCCAGACAAAGAGAGTGGGGGAAACCTTCCCTATTC 1681
Db 5050 CTCTATTAAGTGTCCACTTTTATCCAGACAAAGAGAGTGGGGGAAACCTTCTTACC 5109
Qy 1682 TGGTACGTAACCAAGCACCGTGTGTGCTAGAGCTCAAGCCCTCCCGTGTGTGGAGCC 1741
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Db 5110 TGGTAGCTTACCAAGCCACCGTGTGCTAGGGCTCAAGCCCTCCCGCATGTGGAGCC 5169
Qy 1742 AGATGGAGAGTGTGATTCGTTCAAGCCCGACCTCCATGGGCAACACTTGTCTAT 1801
Db 5170 AGATGGAGAGTGTGATTCGCTTAAACCACTCCATGGGCAACACTTGTCTAT 5229
Qy 1802 ATAGACTGGGCGCTGTCCAGATGAAGTCAACCTTGACGCAACCAAGTATATCA 1861
Db 5230 ACAAGCTGGGCGCTGTTCAGATGAAGTCAACCTTGACGCAACCAATATCATCA 5289
Qy 1862 TGACATGATATGTGCGCTGACCTGAGAGTGTGTACAGATTAAGTGTGTGTGGCGGCG 1921
Db 5290 TGACATGATATGTGCGCGCACCTGAGAGTGTGTACAGAGACTGTGTGTGGCGGCG 5349
Qy 1922 TTTGCGCTCTTTGGCGCGGATTTGCTATCCAGGCGGTGTGATGATGAGTGA 1981
Db 5350 TCTGCGCTCTTGGCGCGGATTTGCTATCCAGGCGGTGTGATGATGAGTGA 5409
Qy 1982 TTTGCTTGTCCGGAAGCGCGCAATCATACCGAGAGGAGTCTTACCGGGAGTTCG 2041
Db 5410 TGTCTTGTCCGGAAGCGCGCAATCATCATGACAGGAGGTTCTTACAGAGTTCG 5469
Qy 2042 ATGAATGGAAGTGTCT 2059
Db 5470 ATGAGATGGAAGAGTGTCT 5487

RESULT 7
US-09-980-559B-3
; Sequence 3, Application US/09980559B
; GENERAL INFORMATION:
; APPLICANT: Yanagi, Masayuki
; APPLICANT: Emerson, Suzanne
; APPLICANT: Buhk, Jens
; APPLICANT: Purcell, Robert
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C
; FILE REFERENCE: NIH255.001NP
; CURRENT APPLICATION NUMBER: US/09/980,559B
; CURRENT FILING DATE: 2002-05-14
; PRIOR APPLICATION NUMBER: PCT/US00/15446
; PRIOR FILING DATE: 2000-06-02
; PRIOR APPLICATION NUMBER: US 60/137,693
; PRIOR FILING DATE: 1999-06-04
; NUMBER OF SEQ ID NOS: 70
; SOFTWARE: FastSeq for Windows Version 4.0
; SEQ ID NO 3
; LENGTH: 9611
; TYPE: DNA
; ORGANISM: Hepatitis C virus
US-09-980-559B-3

Query Match 85.6%; Score 1765.2; DB 5; Length 9611;
Best Local Similarity 91.1%; Pred. No. 0;
Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;

Db 2 TGGCGCTTATCAGCGGCTTATGCGGAGAGCAAGGGGCTTTTGGAGTGCATTAACCA 61
Db 3430 TGGCGCTTATCAGCGGCTTATGCGGAGAGAGAGGCTTCTAGGGTGTATTAATCA 3489
Qy 62 GCTTACCGGCGCGGAGCAAAACAGAGTGAAGGTGAAGTTCAGATCGTGTCAACTGCTG 121
Db 3490 GCTTACCGGCGCGGAGCAAAACAGAGTGAAGGTGAAGTTCAGATCGTGTCAACTGCTG 3549
Qy 122 CCCAGACTTCTTGGCAACCTGATTAACGGGGTGTGTGACTGTCTTACATGAGCCG 181
Db 3550 CCCAGACTTCTTGGCAACCTGATTAACGGGGTGTGTGACTGTCTTACATGAGCCG 3609
Qy 182 GAAAGAGAGCAATTCGATCACTTAAGGATCCGTTATCCAGATGAACCAATGGAGCC 241
Db 3610 GAAAGAGAGCAATTCGATCACTTAAGGATCCGTTATCCAGATGAACCAATGGAGCC 3669
Qy 242 AAGACTGTAGGCTGGCGCGCTCCCAAGGTGCCGCTCATTAACACCATGACATTTGGC 301
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Db 3670 AAGACTGTGGGGCTGGCCCGCTCCCAAGGTTCCCGCTCATTTGACACCGTTACTGG 3729  
Qy 302 GCTCTCGGACCTTTAACTGTCGACAGAGGACCGGATGTCTTCTGTGGCCGACCGG 361  
Db 3730 GCTCTCGGACCTTTAACTGTCGACAGAGGACCGGATGTCTTCTGTGGCCGACCGG 3789  
Qy 362 GTGATGGAGGGGGAGCGCTTTGGCCCGGCTATCTCTTAAGGCTCTGCG 421  
Db 3790 GTGATGGAGGGGGAGCGCTTTGGCCCGGCTATCTCTTAAGGCTCTGCG 3849  
Qy 422 GAGGCGCTCTGTCGTGCCCCGAGACATGCGGTAGGACATTTAGAGCGCGGTATGCA 481  
Db 3860 GGGGTCGGCTGTGTGGCCCCGGGAGACGCGTGGGCTTATTCAGGGGCGCGGTGGA 3909  
Qy 482 CCGGTGAGTGGCTAAGGGCGGTGACCTTATCCCGTGAAGCTTTAGAGACATCAAGA 541  
Db 3910 CCGGTGAGTGGCTAAGGGCGGTGACCTTATCCCGTGAAGACCTTAGGAGACATGGA 3969  
Qy 542 GGTCCCGGTGTTCTAGACAACTCTCCGACAGAGTGCAGAGCTACCAAGTGG 601  
Db 3970 GATCCCGGTGTTCTAGACAACTCTCTCTCAGACAGGTGCCCAAGCTTCCAGGTGG 4029  
Qy 602 CCGACCTGATGCTCCACCGGACGAGTGAAGAGACCAAGGTTCCCGGCGGATACGAG 661  
Db 4030 CCGACCTGATGCTCCACCGGACGAGTGAAGAGACCAAGGTTCCCGGCGGATACGAG 4089  
Qy 662 CTGAGGGCTCAAGGTGCTGTGCTCAACCCCTCGGTGCTGCAACAATGGGCTTTGGTG 721  
Db 4090 CCGAAGGGCTCAAGGTGCTGTGCTCAACCCCTCGGTGCTGCAACGCTGGGCTTTGGTG 4149  
Qy 722 CTTAATGTCGAAGGCCCATGAGGATTGATCTTAATCAATGAGGCTGGGGTAGAGCAATTA 781  
Db 4150 CTTAATGTCGAAGGCCCATGAGGATTGATCTTAATCAATGAGGCTGGGGTAGAGCAATTA 4209  
Qy 782 CTACTGGGACCGGATCAAGTATTCACCTAAGGCAAGTTCCTTGGCCGACGCGGATGT 841  
Db 4210 CCACTGGGACCGGATCAAGTATTCACCTAAGGCAAGTTCCTTGGCCGACGCGGATGT 4269  
Qy 842 CAGGGGGTGTATGACATTAATTTGTGACGAGTGCATCTCAAGGATGCAATCCA 901  
Db 4270 CAGGAGGTGTATGACATTAATTTGTGACGAGTGCATCTCAAGGATGCAATCCA 4329  
Qy 902 TCTTGGGATTTGGGACCTGTCTTGAACAGGACAGACCGGGGGGAGACATGACATGTCG 961  
Db 4330 TCTTGGGATTTGGGACCTGTCTTGAACAGGACAGACCGGGGGGAGACATGACATGTCG 4389  
Qy 962 TGGCAGCGCTACCCCTCCGGGCTCGTCACTGTGCCCATCTTAACATCGAGAGTGG 1021  
Db 4390 TGGCAGCTGTACCCCTCCGGGCTCGTCACTGTGTCCCATCTTAACATCGAGAGTGG 4449  
Qy 1022 CTCTGTCCATCAACGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTTGAAGCAATTA 1081  
Db 4450 CTCTGTCCATCAACGAGAGATCCCTTTTATGAGCAAGGCTATTCCTTTGAAGCAATTA 4509  
Qy 1082 AGGGGGGAGAAATCTCATCTTCTGCACTCAAAAGAAAGTGCACGAGCTCCGCGCA 1141  
Db 4510 AGGGGGGAGAAATCTCATCTTCTGCACTCAAAAGAAAGTGCACGAGCTCCGCGCA 4569  
Qy 1142 AACTGATGCGTGGGCGTCAATGCGGTGCTTAATCAACGCGGCTTGAATGTGTCGTCA 1201  
Db 4570 AGCTGTGCGATTTGGGATCAATGCGGTGCTTAATCAACGCGGCTTGAATGTGTCGTCA 4629  
Qy 1202 TCCGACCAAGTGTGACGTTGTGTGTGAGCAATGACGCGCTCATGACGCGCTTTACG 1261  
Db 4630 TCCGACCAAGTGTGACGTTGTGTGTGAGCAATGACGCGCTCATGACGCGCTTTACG 4689  
Qy 1262 GGGACTTGATTCGGTGAATGACTGCAACAGTGTGTCAACGACAGTGTCACTTCAAGC 1321  
Db 4690 GGGACTTGATTCGGTGAATGACTGCAACAGTGTGTCACTGACAGAGTGTCACTTCAAGC 4749  
Qy 1322 TTGACCTTACCTTCAACATTTGAGACAAATCAAGCTTCCGAGATGCTGTCCGTAATC 1381

Db 4750 TTGACCTTACCTTCAACATTTGAGACAAACAGCTCCCGAGAGTGTCTTCCAGAGCTC 4809  
Qy 1382 AACGTCGGGATGAGCTGAGGAGAGGAGGATCTTAAGATTTGTGACCGGGG 1441  
Db 4810 AACGTCGGGATGAGCTGAGGAGAGGAGGATCTTAAGATTTGTGACCGGGG 4869  
Qy 1442 AGGTCCTTCTGAGCATGTTTGAATCTGTGTCTTCTGAGGTGATAGACGGGTTGTG 1501  
Db 4870 AGGTCCTTCTGAGCATGTTTGAATCTGTGTCTTCTGAGGTGATAGACGGGTTGTG 4929  
Qy 1502 CTGGTATGAGCTTACGCCCCGAGACCAAGTGAAGCTTACAGCATTAACAACCC 1561  
Db 4930 CTGGTATGAGCTTACGCCCCGAGACCAAGTGAAGCTTACAGCATTAACAACCC 4989  
Qy 1562 CGGACCTTCCGTTGGCCAAACATCTTGAATTTTGGGAGGGGCTTTACGGGCTCA 1621  
Db 4990 CGGACCTTCCGTTGGCCAAACATCTTGAATTTTGGGAGGGGCTTTTACGGGCTCA 5049  
Qy 1622 CCGACATGAGCGCCCACTTCTTATCCAGACAAAGCAGAGTGGGAAAACTTCCATATC 1681  
Db 5050 CCGACATGAGCGCCCACTTCTTATCCAGACAAAGCAGAGTGGGAGAACTTCTTATC 5109  
Qy 1682 TGGTACGTTACCAAGCCAGTGTGCGCTAAGCTCAAGCCCTTCCCGTGTGGAC 1741  
Db 5110 TGGTACGTTACCAAGCCAGTGTGCGCTAAGGCTCAAGCCCTTCCCGTGTGGAC 5169  
Qy 1742 AGATGTGAAGTGTGATTCGGTCTCAAGCCCACTTCAAGGAGGCAACCTCGTAT 1801  
Db 5170 AGATGTGAAGTGTGATTCGGTCTTAAACCACTTCAAGGAGGCAACCTCGTAT 5229  
Qy 1802 ATGAGCTGGGCGTGTCCAGATGAAGTCAACCTGACGACCCATCAAGATTAATCA 1861  
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Qy 1862 TGAATGATGTGCGCTGACCTGAGGTGTCACGAGTACTTGGTGTCTGTTGGCGG 1921  
Db 5280 TGAATGATGTGCGCTGACCTGAGGTGTCACGAGTACTTGGTGTCTGTTGGCGG 5349  
Qy 1922 TTTGGCTGTGTTGGCCCGGCTTATGCTTCAACAGGCTGTGTGATTAAGATTAAGA 1981  
Db 5350 TTTGGCTGTGTTGGCCCGGCTTATGCTTCAACAGGCTGTGTGATTAAGATTAAGA 5409  
Qy 1982 TTGCTTGTCCGGAAGCGGCAATCATACCGACGAGGGAAGTCTTACCGGGAGTTG 2041  
Db 5410 TTGCTTGTCCGGAAGCGGCAATCATACCGACGAGGGAAGTCTTACCGGGAGTTG 5469  
Qy 2042 ATGAATGGAAGTGT 2059  
Db 5470 ATGAATGGAAGTGT 5487

RESULT 8  
US-09-980-559B-5  
; Sequence 5, Application US/09980559B  
; GENERAL INFORMATION:  
; APPLICANT: Yanagi, Masaaki  
; APPLICANT: Emerson, Suzanne  
; APPLICANT: Buhk, Jens  
; APPLICANT: Purcell, Robert  
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C  
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C  
; FILE REFERENCE: NIH255.001NP  
; CURRENT APPLICATION NUMBER: US/09/980,559B  
; PRIOR FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: PCT/US00/15446  
; PRIOR FILING DATE: 2000-06-02  
; PRIOR APPLICATION NUMBER: US 60/137,693  
; NUMBER OF SEQ ID NOS: 70  
; SOFTWARE: FASTA for Windows Version 4.0  
; SEQ ID NO 5  
; LENGTH: 9611  
; TYPE: DNA



RESULT 9  
US-09-980-559B-7  
; Sequence 7, Application US/09980559B  
; GENERAL INFORMATION:  
; APPLICANT: Yonagi, Masayuki  
; APPLICANT: Emerson, Suzanne  
; APPLICANT: Buhk, Jens  
; APPLICANT: Purcell, Robert  
; TITLE OF INVENTION: CLONED GENOME OF INFECTIOUS HEPATITIS C  
; TITLE OF INVENTION: VIRUSES OF GENOTYPE 2a AND USES THEREOF  
; FILE REFERENCE: NIH255.001NP  
; CURRENT APPLICATION NUMBER: US/09/980,559B  
; PRIOR FILING DATE: 2002-05-14  
; PRIOR APPLICATION NUMBER: PCT/US00/15446  
; PRIOR FILING DATE: 2000-06-02  
; PRIOR APPLICATION NUMBER: US 60/137,693  
; PRIOR FILING DATE: 1999-06-04  
; NUMBER OF SEQ ID NOS: 70  
; SOFTWARE: FastSeq for Windows Version 4.0  
; SEQ ID NO: 7  
; LENGTH: 9611  
; TYPE: DNA  
; ORGANISM: Hepatitis C virus  
US-09-980-559B-7

Query Match 85.6%; Score 1765.2; DB 5; Length 9611;  
Best Local Similarity 91.1%; Pred. No. 0;  
Matches 1875; Conservative 0; Mismatches 183; Indels 0; Gaps 0;  
  
QY 2 TGGGGCTATCATCGGCTATGCGGAGAGCAAGGGGCTTTGGAGTCAATATCACCA 61  
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QY 3430 TGGCCCAATCATCGGCTATGCGGAGAGCAAGGGGCTTTGGAGTCAATATCACCA 3489  
DB |||||  
QY 62 GCTTACCGCGCGGAGCAAAACCAAGTGAAGGTGAGTTCAGATTCGTCAACTGCTG 121  
DB 3490 GCTTACCGCGCGGAGCAAAACCAAGTGAAGGTGAGTTCAGATTCGTCAACTGCTG 3549  
DB |||||  
QY 122 CCCAGACTTTCTTGGCAACTGATTAACGCGGGTGTGTTGACTGTCTACATGAGCCG 181  
DB 3550 CCCAAACCTTCTTGGCAACTGATTAACGCGGGTGTGTTGACTGTCTACATGAGCCG 3609  
DB |||||  
QY 182 GAACAAAGACCAATTCCTGCTACAGAGGCTCTGATTCAGATTCAGATTCAGATTCAG 241  
DB 3610 GAACAAAGACCAATTCCTGCTACAGAGGCTCTGATTCAGATTCAGATTCAGATTCAG 3669  
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QY 242 AAGACTGCTAGAGTGGCGCGCTCCCAAGTGGCGCGCTCATTAACACCATGCACTTGG 301  
DB 3670 AAGACTGCTAGAGTGGCGCGCTCCCAAGTGGCGCGCTCATTAACACCATGCACTTGG 3729  
DB |||||  
QY 302 GCTCTCTCGGACCTTTAATCTGATCAGAGGACGCGGATGTCATCTCTGTGCGCGAG 361  
DB 3730 GCTCTCTCGGACCTTTAATCTGATCAGAGGACGCGGATGTCATCTCTGTGCGCGAG 3789  
DB |||||  
QY 352 GTGATGCGAGGGGCAAGCTCTTGGCGCGCGCTCATTAATTAAGAGCTCTCTGG 421  
DB 3790 GTGATGCGAGGGGCAAGCTCTTGGCGCGCGCTCATTAATTAAGAGCTCTCTGG 3849  
DB |||||  
QY 422 GAGGCGCTCTGCTGAGCGCGGAGGACATGCGGTAGGCAATATTGAGAGCGGGATGGA 481  
DB 3850 GAGGCGCTCTGCTGAGCGCGGAGGACATGCGGTAGGCAATATTGAGAGCGGGATGGA 3909  
DB |||||  
QY 482 CCGGTGAGTGGCTTAAGCGGCTGAGCTTCACTCCGCTAGAGCTTTAGAGCAACATGA 541  
DB 3910 CCGGTGAGTGGCTTAAGCGGCTGAGCTTCACTCCGCTAGAGCTTTAGAGCAACATGA 3969  
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QY 542 GGTCCCGGTGTTTCAAGCACTCTCCCAAGAGTGGCGGAGCTTCAAGTGG 601  
DB 3970 GGTCCCGGTGTTTCAAGCACTCTCTCCCAAGAGTGGCGGAGCTTCAAGTGG 4029  
DB |||||  
QY 602 CCCACTGATGCTCCACCGGAGCGGTAGAGCAACAGGTCCCGGCTAGTACGAG 661  
DB |||||

DB 4030 CCCACTGATGCTCCACCGGAGCGGTAGAGCAACAGGTCCCGGCTAGTACGAG 4089  
QY 662 CTGAGGGCTTAAGAGTGTGCTGCTCAACCCCTCGTGTGCTCAACATAGGGCTTGGTG 721  
DB |||||  
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QY 722 CTGATGCTCAAGGGCCCATGGGATTTGATTCCTTAACATGAGCATGGGCTGAGCAATTA 781  
DB 4150 CTGATGCTCAAGGGCCCATGGGATTTGATTCCTTAACATGAGCATGGGCTGAGCAATTA 4209  
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QY 782 CTACTGAGAGCCCGATCATGATTCACCTAAGGCAAGTTCCTTCCAGCGGGGTGT 841  
DB 4210 CCACTGAGAGCCCGATCATGATTCACCTAAGGCAAGTTCCTTCCAGCGGGGTGT 4269  
DB |||||  
QY 842 CAGGGGCTGCTTAAGCAATTAATTTGAGAGTGGCACTCCAGGATGCAATCA 901  
DB 4270 CAGAGGGCTTATTAAGCAATTAATTTGAGAGTGGCACTCCAGGATGCAATCA 4329  
DB |||||  
QY 902 TCTTGGGATTTGGCACTGTCTCTTGAACAAGAGAGACCGGGGCGAGACTGACTGTGC 961  
DB 4330 TCTTGGGATTTGGCACTGTCTCTTGAACAAGAGAGACCGGGGCGAGACTGACTGTGC 4389  
DB |||||  
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DB 4390 TCGCCACCGCTACCCCTCGGGCTCGTCACTGTGCCCCATCTTAACATCGAGAGTTG 4449  
DB |||||  
QY 1022 CTCTGTCCATACCGGAGAGATTCCTCTTTATGGAAGCTTATTCCTTTGAAGCAATTA 1081  
DB 4450 CTCTGTCCATACCGGAGAGATTCCTCTTTATGGAAGCTTATTCCTTTGAAGCAATTA 4509  
DB |||||  
QY 1082 AGGGGGGAGACATCTCATCTTCTGCACTCAAAAGAAAGTGCAGAGAGCTCGCGCA 1141  
DB 4510 AGGGGGGAGACATCTCATCTTCTGCACTCAAAAGAAAGTGCAGAGAGCTCGCGCA 4569  
DB |||||  
QY 1142 AACTGTGCGGTGGGCTCAATGCGGTGCTTACTACCGGCGCTTGAATGTGCTGCA 1201  
DB 4570 AACTGTGCGGTGGGCTCAATGCGGTGCTTACTACCGGCGCTTGAATGTGCTGCA 4629  
DB |||||  
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DB 4630 TCCGACCAAGTGTACCTTGTCTGTGCGCACTGAAGCCCTCATGACCGGCTTTACCG 4689  
DB |||||  
QY 1262 GCGACTTGCATTCGCTGATTAAGCTGCAACAGTGTGCAACGAGAGCTGCACTGAGCC 1321  
DB 4690 GCGACTTGCATTCGCTGATTAAGCTGCAACAGTGTGCAACGAGAGCTGCACTGAGCC 4749  
DB |||||  
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DB 4750 TTGACCTTAACCTTCACTTAAGCAATCAAGCTTCCCAAGAGTGTCTCCGTAATC 4809  
DB |||||  
QY 1382 AAGTTCGGGATTAAGCTGCGAGAGGAAAGCCAGATCTACAGATTTGTGGACCGGGGG 1441  
DB 4810 AAGTTCGGGATTAAGCTGCGAGAGGAAAGCCAGATCTACAGATTTGTGGACCGGGGG 4869  
DB |||||  
QY 1442 AGCGCTTCTTGGGATTTGATCTGCTGTCTCTGCGAGGCTTATGAGCGGGGTGTG 1501  
DB 4870 AGCGCTTCTTGGGATTTGATCTGCTGTCTCTGCGAGGCTTATGAGCGGGGTGTG 4929  
DB |||||  
QY 1502 CTGATGATGAGCTTACCGCGCGGAGCAACAGTATGAGCTACGAGATATGAACACC 1561  
DB 4990 CTGATGATGAGCTTACCGCGCGGAGCAACAGTATGAGCTACGAGATATGAACACC 4989  
DB |||||  
QY 1562 CGGAGCTTCCGCTGTGCGCAAGCACTTTGAATTTTGGAGGGGCTTTTACGGGTCTCA 1621  
DB 4990 CGGAGCTTCCGCTGTGCGCAAGCACTTTGAATTTTGGAGGGGCTTTTACGGGTCTCA 5049  
DB |||||  
QY 1622 CCCACATGAGCGCCCACTTCTATCCAGAGCAAGAGTGGGGGAAACCTTCCCTATC 1681  
DB 5050 CCCACATGAGCGCCCACTTCTATCCAGAGCAAGAGTGGGGGAAACCTTCCCTATC 5109  
DB |||||  
QY 1682 TGTAGCGTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTTCCCGTGTGGAGCC 1741  
DB 5110 TGTAGCGTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTTCCCGTGTGGAGCC 5169  
DB |||||







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OY 1382 AACGTCGGGGGTAGGACTGGCAGAGGAGGACGAGGATCTACAGATTGTGGACCGGGGG 1441
    |||
DB 4810 AACGCGGGGGGAGAGCTGGCAGAGGAGGACGAGGATCTATGATTGTGGACCGGGGG 4869
OY 1442 AGCGTCCTTCTGAGCATGTTTGACTGCTGTCTCTGCGAGTGCTATGACGGGGTTGTG 1501
    |||
DB 4870 AGCGCGCCCTCCGGCATGTTTGACTGCTGTCTCTGAGTGCTATGACGGGGTTGTG 4929
OY 1502 CTTGGTATGAGCTTACGCGCGCGGAGACCAAGTATGAGCTATGAGCATGAAACACC 1561
    |||
DB 4930 CTTGGTATGAGCTTACGCGCGCGGAGACCAAGTATGAGCTATGAGCATGAAACACC 4989
OY 1582 CGGAGCTTCCGGTGGCCAAAGCAATCTTGAATTTTGGAGGGCGCTTTAGGGGCTCA 1621
    |||
DB 4990 CGGGGCTTCCGGTGGCCAAAGCAATCTTGAATTTTGGAGGGCGCTTTAGGGGCTCA 5049
OY 1622 CCCACATAGACGCGCATCTTCTATCCAGACAAAGAGAGTGGGAAAACTTCCCTATC 1681
    |||
DB 5050 CTGATATAGATGCCCATCTTTTATCCAGACAAAGAGAGTGGGAAAACTTCCCTATC 5109
OY 1682 TGGTAGCGTACCAAGCCGCTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGAGC 1741
    |||
DB 5110 TGGTAGCGTACCAAGCCGCTGTGCGCTAGAGCTCAAGCCCTCCCGTGTGGAGC 5169
OY 1742 AGATGGAGAGTGTGATCCGCTCAAGCCGCTCCATGGGGCAACACTCTGTAT 1801
    |||
DB 5170 AGATGGAGAGTGTGATCCGCTCAAGCCGCTCCATGGGGCAACACTCTGTAT 5229
OY 1802 ATGAGCTGGGCGCTGTCCAGAAAGTCAACCTGACCGACCCAGTCAACCAATATCA 1861
    |||
DB 5230 ACAGACTGGGCGCTGTCCAGAAAGTCAACCTGACCGACCCAGTCAACCAATATCA 5289
OY 1862 TGACATGATGTGCGCTGACCTGAGAGTGTGACAGATGCTGGTGTCTGTTGGCGGC 1921
    |||
DB 5290 TGACATGATGTGCGCTGACCTGAGAGTGTGACAGATGCTGGTGTCTGTTGGCGGC 5349
OY 1922 TTCTGGGCTGTGGCGCGGTATGCTATCCAGAGGCGTGGTCAATAGAGTAA 1981
    |||
DB 5350 TTCTGGGCTGTGGCGCGGTATGCTATCCAGAGGCGTGGTCAATAGAGTAA 5409
OY 1982 TTGCTTGTCCGGAAGCGGCAATCATACCGAGAGGAGTCTCTACCGGGAGTTG 2041
    |||
DB 5410 TCGTCTTGTCCGGAAGCGGCAATCATACCGAGAGGAGTCTCTACCGGGAGTTG 5469
OY 2042 ATGAATGGAAGAGTCT 2059
    |||
DB 5470 ATGAATGGAAGAGTCT 5487
    |||

RESULT 11
US-60-752-866-8
; Sequence 8, Application US/60752866
; GENERAL INFORMATION:
; APPLICANT: Roche Palo Alto LLC
; APPLICANT: Dietrich, Paul
; APPLICANT: Le Pogam, Sophie
; APPLICANT: Kosaka, Alan
; APPLICANT: Najera, Isabel
; TITLE OF INVENTION: HCV Shuttle Replicon Vectors
; FILE REFERENCE: R0277A-PRO
; CURRENT APPLICATION NUMBER: US/60-752,866
; CURRENT FILING DATE: 2005-12-21
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO 8
; LENGTH: 10644
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Nucleotide sequence of plasmid pSS-1_1a_5'Ab1si_1ac2amc_3'BarII
US-60-752-866-8
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Query Match      83.8%; Score 1727.8; DB 12; Length 10644;
Best Local Similarity 89.9%; Pred. No. 0;
Matches 1052; Conservative 0; Mismatches 207; Indels 0; Gaps 0;

OY 1 ATGGGCGCTTATCAGCGGCTTATGCGGAGAGACAGAGAGGCGCTTTGGAGTGAATACACC 60
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DB 3347 ATGGGCGCTTATCAGCGGCTTATGCGGAGAGACAGAGAGGCGCTTATGAGTGAATACACC 3406
OY 61 AGCTTGACCGGCGGAGACAAAACCAAGGTGAGGGTGAAGTTCAATGTCATCTGCT 120
    |||
DB 3407 AGCTTGACCGGCGGAGACAAAACCAAGGTGAGGGTGAAGTTCAATGTCATCTGCT 3466
OY 121 GCCAGACTTCTTGGCAACCTGATTAACGGGGGTGTGTGGAAGTGTCACTACAGTGAAGCC 180
    |||
DB 3467 ACACATATCTTCTGCGCAACCTGATTAACGGGGGTGTGTGGAAGTGTCACTACAGTGAAGCC 3526
OY 181 GGAAACAGAGACCAATTTGCGTCACTTAAGGGGTCTGTATTCAGAGTGTACACCAATGTGAC 240
    |||
DB 3527 GGCTCAAGAGACCTTGGCGGCGCCAAAGGGCCCAATCACCAAAATGATACCAATGTGAC 3586
OY 241 CAAGACTCTGTAGGCTGCGCTCCCAAGGTGCGGCTCATTAACATGACCTTGC 300
    |||
DB 3587 CAAGACTCTGTAGGCTGCGCTCCCAAGGTGCGGCTCATTAACATGACCTTGC 3646
OY 301 GGCTCTGAGACCTTATCTGTGACAGAGGACCGGCAATGCTATCTGTGCGGCGGAC 360
    |||
DB 3647 GGCTCTGAGACCTTATCTGTGACAGAGGACCGGCAATGCTATCTGTGCGGCGGAC 3706
OY 361 GGTGATGAGAGGAGGAGCGCTGTTCGCGCGGCTATCTCTTAATTGAAGGCTCTGC 420
    |||
DB 3707 GGTGATGAGAGGAGGAGCGCTGTTCGCGCGGCTATCTCTTAATTGAAGGCTCTGC 3766
OY 421 GAGAGCGCTCTGTGCTGTGCGCGGACAGACATGCGGTAGGCAATTTAGAGCGCGGTATGC 480
    |||
DB 3767 GAGAGCGCTCTGTGCTGTGCGCGGACAGACATGCGGTAGGCAATTTAGAGCGCGGTATGC 3826
OY 481 ACCGCTGAGAGTGTGCTTAAGCGGCTGACCTTCAATCCCGTGAAGAGCTTGAAGCAACATG 540
    |||
DB 3827 ACCGCTGAGAGTGTGCTTAAGCGGCTGACCTTCAATCCCGTGAAGAGCTTGAAGCAACATG 3886
OY 541 AGGTCCCGGAGTGTCTGAGCAACCTCTCCCAACAGAGTGCACCAAGTATCCCAAGT 600
    |||
DB 3887 AGATCCCGGAGTGTCTGAGCAACCTCTCTCAACAGAGTGCACCAAGTATCCCAAGT 3946
OY 601 GCCACCTGATGCTCCCAACCGGCTTAAGAGCAACCAAGTATCCCGGCGGATATGCA 660
    |||
DB 3947 GCCACCTGATGCTCCCAACCGGCTTAAGAGCAACCAAGTATCCCGGCGGATATGCA 4006
OY 661 GCTCAGGGCTTCAAGAGTGTGCTCAACCCCTCCGTTGCTGCAACAATGGGCTTTGGT 720
    |||
DB 4007 GCTCAGGGCTTCAAGAGTGTGCTCAACCCCTCTGTGCTGCAACGCTGGGCTTTGGT 4066
OY 721 GCTTACATGTCCAAAGGCCATGAGATGTATCTTAATCAGAGCTGGGCTGAGCAAT 780
    |||
DB 4067 GCTTACATGTCCAAAGGCCATGAGATGTATCTTAATCAGAGCTGGGCTGAGCAAT 4126
OY 781 ACTACTGAGCGCGGATCACTGATTCACCTTACCGGCAAGTTCTTGGCGGCGGCTGT 840
    |||
DB 4127 ACCACTGCAACCCCATCACTACCTCACTCAACGCAAGTTCTTGGCGGCGGCTGT 4186
OY 841 TCAGGGGCTGCTTATGACATATATATTTGTAACAGAGTGCACCTCAAGGATGCAATCC 900
    |||
DB 4187 TCAGGGGCTGCTTATGACATATATATTTGTAACAGAGTGCACCTCAAGGATGCAATCC 4246
OY 901 ATCTTGGCATTTGGCACTGTCTTGAACCAAGAGACCGGCGGCGGAGACTGACTGTG 960
    |||
DB 4247 ATCTTGGCATTTGGCACTGTCTTGAACCAAGAGAGTGGGCGGCGGAGACTGACTGTG 4306
OY 961 CTCGCAACCGCTACCGCTTCGGGCTCGGTCACTGTGCCCATCTCTTAATATGAGAGTT 1020
    |||
DB 4307 CTCGCACTGTCAACCGCTTCGGGCTCGGTCACTGTGCCCATCTCTTAATATGAGAGTT 4366
OY 1021 GCTGTGTCACCTACCGGAGAGATCCCTTTATGGAAGGCTATTCCTCTTGAAGCAAT 1080
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Db 4367 GCTCTGTCCACACCGGAGAGATCCCTTTTACGGCAAGGCTATCCCTCGAGGTGATC 4426
Qy 1081 AAGGGGGGAGACATCTCATCTTCTGCCACTCAAGAGAAAGTGGAGAGCTGCCCGCA 1140
Db 4427 AAGGGGGGAGACATCTCATCTTCTGCCACTCAAGAGAAAGTGGAGAGCTGCCCGCG 4486
Qy 1141 AACTGCTGCGGTTGGGCGCTCAATGCGCGCTTCTTACCGGGCGCTTGAATGTCGCTC 1200
Db 4487 AAGCTGCTGCAATGGGCAATCAATGCGCGCTTCTTACCGGGCGCTTGAATGTCGCTC 4546
Qy 1201 ATCCGACCAAGTGTGACCTTGTGCTGTGCACTGACGCGCTGATGACCGGCTTTTACC 1260
Db 4547 ATCCGACCAAGGCGGAGATTTGTGCTGTGCACTGACGCGCTGATGACCTGCTTTACC 4606
Qy 1261 GCGGACTTGTGATTCGGTATTAATCTGCAACAGTGTGTACCAAGACAGTGCATTTCAAC 1320
Db 4607 GCGGACTTGTGATTCGGTATTAATCTGCAACAGTGTGTACCAAGACAGTGCATTTCAAC 4666
Qy 1321 CTGTAACCTTACCTTACCAATGAGCAATCAAGCTTCCGAGAGTGTGTCTCCGTAATC 1380
Db 4667 CTGTAACCTTACCTTACCAATGAGCAATCAAGCTTCCGAGAGTGTGTCTCTCCAGACT 4726
Qy 1381 CAACGTCGGGGTGAAGACTGTCAGAGGGAAGCCAGGATCTAGATTTGTGACACCGGGG 1440
Db 4727 CAACGTCGGGGGAGAGCTGTCAGAGGGAAGCCAGGATCTATATGATTTGTGACACCGGGG 4786
Qy 1441 GAGGCTCTTCTGTCATGTTTGAATCTGTCTGTCTCTGCGAGTGTCTATAGACCGGTTGT 1500
Db 4787 GAGGCGCTCTCGGCAATGTTTGAATCTGTCTGTCTCTGAGTGTCTATACCGGCTGT 4846
Qy 1501 GCTGTGATGAGCTTACCGCGCGGAGACACAGTGAAGCTTACGAGCATATGAACACC 1560
Db 4847 GCTGTGATGAGCTACCGCGCGGAGACTTACGTTAGCTTACGAGCTTACGAGTGAACACC 4906
Qy 1561 CCGGGACTTCCGCTGTGCCAAGACACTTGTGAATTTTGGAGGGCGCTTTTACGGGCTTC 1620
Db 4907 CCGGGGCTTCCGCTGTGCCAAGACACTTGTGAATTTTGGAGGGCGCTTTTACGGGCTTC 4966
Qy 1621 ACCCATATGAGCGCCACTTCTTATCCAGACAAAGAGTGGGAAAACCTTCCCTAT 1680
Db 4967 ACTCATATGAGTCCCACTTTTATCCAGACAAAGAGTGGGAAAACCTTCTTATC 5026
Qy 1681 CTGGTAGCTTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTCCCGCTGTGGAGAC 1740
Db 5027 CTGGTAGCTTACCAAGCCACCGTGTGCTAGAGCTCAAGCCCTCCCGCTGTGGAGAC 5086
Qy 1741 CAGATGTGAGTGTCTTGAATCCGTCTCAAGCCCACTTCATGGGCCAACCTCTGTCTA 1800
Db 5087 CAGATGTGAGTGTCTTGAATCCGTCTTAAACCACTTCATGGGCCAACCTCTGTCTA 5146
Qy 1801 TTTAGACTGGGCGCTGTCCAGAAATGATCACTTGAAGCAGCAGCCAGTCAAGATATATC 1860
Db 5147 TTAGACTGGGCGCTGTCTAGAAATGATCACTTGAAGCAGCAGCCAGTCAAGATATATC 5206
Qy 1861 ATGACATGATGTCCGCTGACCTGAGAGTGTGTCAGAGTACCTGGGTGTCTGTTGGCGGC 1920
Db 5207 ATGACATGATGTCCGCTGACCTGAGAGTGTGTCAGAGTACCTGGGTGTCTGTTGGCGGC 5266
Qy 1921 GTTCTGCTGCTTTGGCGCGTATTTGCTATCCACAGAGTGTGTCTATGATGATAG 1980
Db 5267 GTTCTGCTGCTTTGGCGCGTATTTGCTATCCACAGAGTGTGTCTATGATGATAG 5326
Qy 1981 ATTGTCTTCCGAAAAGCCGCAATCAATCCGACAGGAAAGTCTCTACCGGAGATTC 2040
Db 5327 ATCTGTCTTCCGAAAAGCCGCAATCAATCCGACAGGAAAGTCTCTACCGGAGATTC 5386
Qy 2041 GATGAATGGAAGATGCT 2059
Db 5387 GATGAATGGAAGATGCT 5405
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US-60-752-866-2
; Sequence 2, Application US/60752866
; GENERAL INFORMATION:
; APPLICANT: Roche Palo Alto LLC
; APPLICANT: Dietrich, Paul
; APPLICANT: Le Pogam, Sophie
; APPLICANT: Kosaka, Alan
; APPLICANT: Najera, Isabel
; TITLE OF INVENTION: HCV Shuttle Replicon Vectors
; FILE REFERENCE: R0277A-PRO
; CURRENT APPLICATION NUMBER: US/60/752, 866
; CURRENT FILING DATE: 2005-12-21
; NUMBER OF SEQ ID NOS: 33
; SOFTWARE: PatentIn version 3.2
; SEQ ID NO: 2
; LENGTH: 11509
; TYPE: DNA
; ORGANISM: Artificial Sequence
; FEATURE:
; OTHER INFORMATION: Nucleotide sequence of plasmid pSS-1
US-60-752-866-2

Query Match 83.8%; Score 1727.8; DB 12; Length 11509;
Best Local Similarity 89.9%; Pred. No. 0;
Matches 1852; Conservative 0; Mismatches 207; Indels 0; Gaps 0;

Qy 1 ATGGGCGCTATCAGCGCTATGCCCAGAGCAAGAGGGGCTTTGGAGATGATATCAC 60
Db 3347 ATGGGCGCTATATACGGCTATCTCCACAGAGCGAGGCTTACTTGGCTGATCATCACT 3406
Qy 61 AGCTTGACCGGCGCGGACAAAAACAGGTGAGAGGTGAGTTCAAGATGTCATCTGCT 120
Db 3407 AGCTTGACCGGCGGAGACAGAACAGGTCAGAGGGGAGGTCCAAAGTGTCCACCGCA 3466
Qy 121 GCCGACTTTCTTGACCACTGCTATTAAGGAGTGTGTTGAGCTGTCTACCATGAGCC 180
Db 3467 ACACATCTTCTTGCGCAGCTGCTCAATGAGCGGTGTGAGCTGTCTATCATGTGTC 3526
Qy 181 GGAACAAAGACATTTGCGTCACTAAGGTCCTGTATCCAGATGATACCAATGTGAC 240
Db 3527 GGTCTAAAGACCTTTGCGGCGCCCAAGGGCCCAATCACCAATGTATCAACATGTGAC 3586
Qy 241 CAAGACTCTGATGAGTGGCCGCTCCCAAGGTGCGCTCATTTAAACCATGACCTTGC 300
Db 3587 CAAGACTCTGATGAGTGGCCGCTCCCAAGGTGCGCTCATTTAAACCATGACCTTGC 3646
Qy 301 GGTCTCTGAGACTTTTACCTGTGTCAAGAGCAGCCGATGATCTCTGTGCGCGAGCG 360
Db 3647 GGTCTCTGAGACTTTTACCTGTGTCAAGAGCAGCCGATGATCTCTGTGCGCGAGCG 3706
Qy 361 GGTGATGAGGAGGAGCTGCTTTCGCGCGGCTTATCTTATCTTGAAGGCTCTCG 420
Db 3707 GGTGATGAGGAGGAGCTGCTTTCGCGCGGCTTATCTTATCTTGAAGGCTCTCG 3766
Qy 421 GGAGGCTCTGTGCTGTGCGCGCAGAGATGCGGTAGGCAATTCAGAGCGCGTATATC 480
Db 3767 GGAGGCTCTGTGCTGTGCGCGCAGAGATGCGGTAGGCAATTCAGAGCGCGTATATC 3826
Qy 481 ACCGTGAGATGTGCTTAAGCGCGTGAATTCATCCCGTGAAGAGCTTGAAGCAACCATG 540
Db 3827 ACCGTGAGATGTGCTTAAGCGCGTGAATTCATCCCGTGAAGAGCTTGAAGCAACCATG 3886
Qy 541 AGTCCCGCGGTGTTCTGAGCAACCTCCACAGAGAGTCCCGAGAGCTACCAAGTG 600
Db 3887 AGTCCCGCGGTGTTCTGAGCAACCTCCCTCTCACAGAGAGTCCCGAGAGCTTCAAGTG 3946
Qy 601 GCCCACTGATGCTCCCAAGCGGAGCGGTAAAGACCAAGTCCCGGCGCATATACGA 660
Db 3947 GCCCACTGATGCTCCCAAGCGGAGCGGTAAAGACCAAGTCCCGGCGCATATACGA 4006
Qy 661 GCTCAGGCTTACAGATGCTGTGCTCAACCTCTCGTTGCTGCAACATGGGCTTTGGT 720
Db 4007 GCCCAGGCTTACAGATGCTGTGCTCAACCTCTGTGCTGCAACATGGGCTTTGGT 4066
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Db 3707 GGTGATAGAGAGGGATAGCCTGCTTTCGCCCCGCCATTTCTTACTTGAAAGCTCTCTG 3766
Qy 421 GAGAGCCTCTGCTGTGCCCCGAGAGACATGCGTAGGCAATTAAGACCCGGTATGC 480
Db 3767 GGGGGGTCCCGCTGTGTGGCCCCCGGGACAGCGCGTGGGCTTAATGAGGGCCCGGTGTGC 3826
Qy 481 ACCCGTAGAGTGGCTTAAGCGCGGTGAATTCAATCCCGTAGAGAGCTTGAAGCAACCATG 540
Db 3827 ACCCGTAGAGTGAAGCGGTGAATTATATCCGTGAGAAACCTTAGAGCAACCATG 3886
Qy 541 AGTCCCCCGGTGTCTCAGACAACTCTCCGACAGAGAGTCCCGACAGTACCAAGT 600
Db 3887 AATATCCCGGTGTTCACGAGCAACTCTCTCCACAGAGAGTCCCGACAGTTCAGAGT 3946
Qy 601 GCCCACTGTGATCTCCACCGGACGCGGTAAAGAGCAAGAGTCCCGGCGCATACGA 660
Db 3947 GCCCACTGTGATCTCCACCGGACGCGGTAAAGAGCAAGAGTCCCGGCTCGTAACGA 4006
Qy 661 GCTCAGGGGTAGAGGTGTGGTGCATCCCTCGTTGTCGAACATGGGCTTTGCT 720
Db 4007 GCCCAGGGGTAGAGGTGTGGTGCATCCCTCGTTGTCGAACGCTGGGCTTTGCT 4066
Qy 721 GCTTACATGTCCAAAGGCCCATGSGATTTGATCTTAATCAGAGACTGGGTGAGAACAT 780
Db 4067 GCTTACATGTCCAAAGGCCCATGSGGTGATCTTAATCAGAGACTGGGTGAGAACAT 4126
Qy 781 ACTTACTGCAAGCCCATGACATGTTCCACTTACGAGCAAGTCTTGGCGGCGGTGT 840
Db 4127 ACCCACTGGAGGCCCATGACATGTTCCACTTACGAGCAAGTCTTGGCGGCGGTGT 4186
Qy 841 TCAGGGGGGTCTTAATGACATTAATTTGAGAGGTGCATCCACGAGTGCACATTC 900
Db 4187 TCAGAGGGGTCTTAATGACATTAATTTGAGAGGTGCATCCACGAGTGCACATTC 4246
Qy 901 ATCTTGGGATTTGGCACTGTCTTTCGCAAGAGAGAGCGCGGGCGAGACTGTG 960
Db 4247 ATCTTGGGATTTGGCACTGTCTTTCGCAAGAGAGAGCGCGGGCGAGACTGTG 4306
Qy 961 CTGCGCACCGCTAACCCCTCCGGGCTTCGTGACTGTGCCCCATCTTAATCAGAGATT 1020
Db 4307 CTGCGCACCTGTAAACCCTCCGGGCTTCGTGACTGTGCCCCATCTTAATCAGAGATT 4366
Qy 1021 GCTCTGTCACTAACCGGAGAGATCCCTTTTATGGAAGGCTATCCCTTGAGCAATT 1080
Db 4367 GCTCTGTCACTAACCGGAGAGATCCCTTTTATGGAAGGCTATCCCTTGAGGATTC 4426
Qy 1081 AAGGGGGGAGACATCTCATCTTCTGCACTCAAGAAAGATGCGACGAGCTCCGCGCA 1140
Db 4427 AAGGGGGGAGACATCTCATCTTCTGCACTCAAGAAAGATGCGACGAGCTCCGCGCG 4486
Qy 1141 AAACGTGTGCGTGGGCGCTCAATGCGGTGCTTACTACCGGCGCTTATGTGTCTGTC 1200
Db 4487 AAGCTGTGTGCAATTTGGGCAATGATGCGGTGCTTACTACCGGCGCTTATGTGTCTGTC 4546
Qy 1201 ATCCCGACCAAGTGTGAAGTGTGCGGTGCGGCAACGAGCCCTTATGACCGGCTTTAC 1260
Db 4547 ATCCCGACCAAGGCGCATGTGTGTGTGTGTGACGAGATGCTCTATGACTGACTTTAC 4606
Qy 1261 GCGCATTTGATTCGGTGTATGACTGCAACAGTGTGTGACCCAGACAGTTCATAC 1320
Db 4607 GCGCATTTGATTCGGTGTATGACTGCAACAGTGTGTGACTGACATTCATTTAC 4666
Qy 1321 CTTGACCTTACCTTACCAATGAGACATGACGCTTCCCGAGAGTCTGTCCGCTACT 1380
Db 4667 CTTGACCTTACCTTATTCATTTGAGACAAACGAGCTCCCGAGAGTCTGTCTTCAGACT 4726
Qy 1381 CAACGTGCGGGTATGAGCTGCGAGAGGAGGACGAGATTAAGATTTTGGACACCGGG 1440
Db 4727 CAACGTGCGGGAGAGCTGCGAGAGGAGGACGAGATTAAGATTTTGGACACCGGG 4786
Qy 1441 GAGCGCTTCTGAGCAATTTTGGCTGTGCTCTCTGCGAGTGTATGACCGGGGTGT 1500
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Db 4787 GAGGCCCCCTCCGAGATTTGCACTGTCCGCTCTGTGTAGTGTATGACGCGGGCTGT 4846
Qy 1501 GCTTGTATGAGCTTACGCCCCCGGAGACCAAGTTAGGCTTACGAGCATTAAGAACACC 1560
Db 4847 GCTTGTATGAGCTTACGCCCCCGGAGACTAGTTAGGCTTACGAGCATTAAGAACACC 4906
Qy 1561 CCGGACCTTCCCGTGTGCGCAAGACCATTTTGAATTTTGGAGGGGCTTTTACGGGCTTC 1620
Db 4907 CCGGGGCTTCCCGTGTGCGCAAGACCATTTTGAATTTTGGAGGGGCTTTTACGGGCTTC 4966
Qy 1621 ACCCACTAGACGCCCATCTTATCCGAGCAAAAGAGAGTGGGAAAACTTCTTAT 1680
Db 4967 ACTCATATAGATGCCCATTTTATCCAGCAAAAGCAGAGTGGGAGAACTTCTTATC 5026
Qy 1681 CTGTGAGGTATCAAGCCACGTTGCGCTAGAGTTAAAGCCCTCCCGGTGGAGAC 1740
Db 5027 CTGTGAGGTATCAAGCCACGTTGCGCTAGAGGTCAAGGCCCTCCCGCATGTGGAGAC 5086
Qy 1741 CAGATGTGGAAGTCTTATCCGTCTCAAGCCCACTCTCAATGGGCAACACTGTGCTA 1800
Db 5087 CAGATGTGGAAGTCTTATCCGTCTTAAACCACTCTCAATGGGCAACACTGTGCTA 5146
Qy 1801 TATAGACTGGGCGCTGTCCAGAAATGAGTCAACCTTACGACCCAGTCAACCAATATC 1860
Db 5147 TACAGACTGGGCGCTGTTCAGAAATGAGTCAACCTTACGACCCAGTCAACCAATATC 5206
Qy 1861 ATGACATATATGTGGCTGACCTGAGAGTCCGTACAGATTAACCTGGGTCTGTGGCGGC 1920
Db 5207 ATGACATATATGTGGCTGACCTGAGAGTCCGTACAGACACTGGGTCTGTGGCGGC 5266
Qy 1921 GTTCTGTGCTTTTGGCGCGGTATTTCTTATCCACAGGCTGCGGTATAGTATG 1980
Db 5267 GTTCTGTGCTTTGCGCGGTATTTCTTATCCACAGGCTGCGGTATAGTATG 5326
Qy 1981 ATTGTCTTCCGGAAGCCGCAATCATATCCGACAGGAGATCTTACCGGAGTTC 2040
Db 5327 ATTCGTCTTCCGGAAGCCGCAATCATATCTGACAGGAGTTCATACGAGAGTTC 5386
Qy 2041 GATGAATGGAAGATGCT 2059
Db 5387 GATGAATGGAAGATGCT 5405
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RESULT 14
US-10-559-431-1
; Sequence 1, Application US/10559431
; GENERAL INFORMATION:
; APPLICANT: BIOMERIEUX
; TITLE OF INVENTION: INSITU NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
; TITLE OF INVENTION: Composition comprising the polypeptide NS3/NS4 and the polypeptide
; TITLE OF INVENTION: of HCV, expression vectors including the corresponding nucleic acid
; FILE REFERENCE: ADENOVIR
; CURRENT APPLICATION NUMBER: US/10/559,431
; NUMBER OF SEQ ID NOS: 27
; SOFTWARE: PatentIn version 3.1
; SEQ ID NO 1
; LENGTH: 2844
; TYPE: DNA
; ORGANISM: Artificial sequence
; FEATURE:
; OTHER INFORMATION: sequence coding for NS3NS4
; NAME/KEY: CDS
; LOCATION: (1)..(2844)
; OTHER INFORMATION:
US-10-559-431-1
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Query Match 67.2%; Score 1384.4; DB 6; Length 2844;
Best Local Similarity 79.5%; Pred. No. 0;
Matches 1637; Conservative 0; Mismatches 421; Indels 0; Gaps 0;
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Oy	1	TTGGCGCTTATCAGGCGCTTATGCCACAGACA	CAAGGGGCCCTTTGGGATGCTAATACC	60
Db	1	ATGGGGCTTATCAGGCGCTTATCCCA	CAAAACGGGGGCGCTTGGCTGTATCATCT	60
Oy	61	AGCTTGAACCGGCGGGGACAA	AAAAACGAGGTGAGGGGTGAGTTCCAGATCGTGTCAACTGCT	120
Db	61	AGCTTACAGGTCCGGAC	CAAGAACGAGTCCATGGGAGGTTCAAGTGTCTTCCACCGCA	120
Oy	121	GCCGAGACTTTCTTGGCA	ACTGCATTTAACGAGGGGTGTGGAGTGTCTACATGAGACC	180
Db	121	ACGCAATCTTCTTGGCGA	CTGGCGTCAATGCGCGTGTGGACCGTCTACATGTGTGC	180
Oy	181	GGAAACAGGACCATTTGGCT	CACCTTAAGGGTCTCTTATCCAGATGTACCAATGTGAC	240
Db	181	GGCTCGAAGACCTTGGCCGGCCCGA	AGGGTCCAACTACCCAAATGTACCAATGTGAC	240
Oy	241	CAAGACCTCGTAAAGGTGGCCCGCT	CCCCCAAGTGGCCGCTCATTTAAACCATGTGACTTGC	300
Db	241	CAGAGCTCTGTGCGGTGGCCGGCCGCC	CCCCGGGGGCGCTCTCATGACACCTGTGACCTTGC	300
Oy	301	GCGTCTCTCGACCTTTTAC	CTGTGTACAGAGCAGCGCGCATGTCAATTCTGTGCGCGCA	360
Db	301	GGCAGCTCGACCTTTTACTTGTGT	CACAGAGCATGCCATGTCAATTCCGGTGGCGCGGGA	360
Oy	361	GGTATGCGACAGGGGACGCTGCT	TTTCCGCCGCTCATCTTACTTGAAGGCTCTCG	420
Db	361	GGCACAAGACAGGGGGAATCTA	CTCTCCCTTAGGCGCGCTCTACTACGAAAGGCTCTCG	420
Oy	421	GGAGGGCCCTGTGCTGTGCCCCGG	ACAGACATCCCTAAGGCATTTACAGACCGCGGTATGC	480
Db	421	GGTGACCACTGTCTTGGCTTCCGGGG	ACCTTGTGAAGCATTTCCGGGCTGTGTGTGC	480
Oy	481	ACCCTGAGATGAGCTTAAGCGGTG	ACTTATCCCGTAAAGAGCTTAAAGACAAACATG	540
Db	481	ACCGGGGGGGTGGGAAAGCGGTG	ACTTACTTAACCGTGTAGTCTATGAAACATACATG	540
Oy	541	AGGTCCCGGTGTCTCAGAC	ACTCTTCCCAACAGATGCCCCAGAGCTTACCAAGTG	600
Db	541	CGGTCTCCGGTCTTCAAGACA	ACTCATCCCCCTCGCGCTGTACCGCAAACTTCCAAAGTG	600
Oy	601	GCCACCTGACATGCTCCCAACGGG	ACGGGTAAAGACACAAGGTCCCGGCGCATAGCA	660
Db	601	GCACATTTACAGCTCCCATGCG	ACGGCAAGACCAAAAGTCCGGCTGTACATGCA	660
Oy	661	GCTCAGGGCTCAAGAGTCTGTGT	CAACCCCTCGTGTGTCGAACAATGGGCTTTGT	720
Db	661	GCCCAAGGTACAAAGTGTCTGT	CCTTAACCGTCTGTGCTGCACATGGGCTTTGGA	720
Oy	721	GCTTACATGTCCAAAGGCCAT	GGGATTTGATCTTAACATCAGAGTGGGTGAGCAATT	780
Db	721	GCATATATGTCCAAAGGCAT	ATGGCATCGAGCTTAACATCAGACTGGGGTAAAGCATT	780
Oy	781	ACTACTGGCACCCGATCA	CGTATTTCCACTTAACGCAAGTTCTTGGCGACGGGGGT	840
Db	781	ACCAAGGGGCGCCCATCAT	CGATCCCACTATGGCAAGTTCTTGGCGAGGGGTATGC	840
Oy	841	TCAGGGGGTGTATTATGA	CAATAATTTGTGACGAGTGCACATCAGGATGACATCC	900
Db	841	TCGGGGGGCGCTATGACA	TCTAATAATGTACGAATGTCACTACATCTGA	900
Oy	901	ATCTTGGGCAATTGGCAT	CTGTCTTGAACCAAGACAGACCGCGGGGCGAGACTGTG	960
Db	901	ATCTTGGGCAATCGGCA	AGTCTCTGGATCAGGCAAGAGAGGCTGGAGGCGGCTGTGTG	960
Oy	961	CTCGGCACCCGCTTCCGGG	CTCCGTCACTGTGCCCATCTTAACATGTGAGAGGTT	1020
Db	961	CTCGGCACCCGCA	CGGCTTCGGGAATCGATCACCGTGCACACCCCAATGTGAGAAATG	1020
Oy	1021	GCTCTGTCCACTACCGAG	AGATCCCTTTATGGCAAGGCTATTTCCCTTGAAGCAATT	1080
Db	1021	GCCTGTTCMAACATCGGG	AGATTTCCCTTCTATGCAAGAGCAATCCCATTTGAGGCCATC	1080
Oy	1081	AAGGGGGGAGACATCT	CATCTTCTGCACTCAAGAAAGTGCAGAGACTCGCGCA	1140

Db	1081	AAAGGGGGGAAGGACATCTCATTTCTTGCCATTCCAAAGAAAGTGTGAACGACTGCCGCA	1140
Qy	1141	AAACTGGTCGGGTTGGGGCGTCAATGCCGTGGCTTACTACGGCGGCTTTGATGTGTCCGTC	1200
Db	1141	AAAGCTGACAGGCGCTCGGACCTCAATGCTGTAGCGATTATTAACCGGGGCTCTCGATGTCTCGTC	1200
Qy	1201	ATCCCGACCAAGTGTGAAGTTGTGTGTGGCCAACTBAACGCCCTCATGACCGGCTTTAAC	1266
Db	1201	ATACCGACTACCGGAGAGCTGTGTGTGTGGCAACAGACGCTTAATGAAGGGCTTTAC	1266
Qy	1261	GGCGACTTCGATTCGTGTGTAGACTGCAACAGTGTGTCAACCCAGACAGTGTGACTTAC	1320
Db	1261	GGCGACTTTTGACTGAGTATGACTGCAACATGTGTCAACCCAGACAGTGTGATTTACG	1320
Qy	1321	CTTGAACCTTACCTTACACCTTTGAACATACGCTTTCCCAAGATGCTGTCTCCGTAAT	1380
Db	1321	TTGATATCCCACTTTCACCATTTGAAACAGAACCCGTGCCCAAGCGGGGTGCGCGTCG	1380
Qy	1381	CAAGTCGGGGTATGAGACTGGCAGAGGGAGCAAGCATTTACATATTTGTGTGACCGGG	1440
Db	1381	CAGGGCGCAAGTATAGACTGGCGAGGGGCGCAGAGTGGCATCTACAGTTTTGTGACCTCAGGA	1440
Qy	1441	GAGCGTCCCTTCTGSCATGTTTGACTCGTCTGTCTCTCTGACAGTGTCTATGACCGGGTTGT	1500
Db	1441	GAAAGGCGCCCTCAGGCAATGTTGACTCTCGTCCGCTCTGTGTGAGTGTCTATGACGCGGGTGC	1500
Qy	1501	GCTTGTATATGAGCTTATGSCCGCGGAGAACCAACTTATGGCTTACGAGATATCATAAACC	1560
Db	1501	GCTTGTATATGAGCTTACGCGCCGCTGAGACTACACTCAGGTGTGGGGCTTACCTBAATACA	1560
Qy	1561	CCGGGACTTCCCGGTGTGCAAGACACTTTGAATTTTGGAGGGCGTCTTTACGGGTCTC	1620
Db	1561	CCAGGGTTGCCCGTCTGCAAGAGCAATCTGAGTTCTGGGAAAGCGTCTTACAGGCGCTC	1620
Qy	1621	ACCCACATATAGACGCCCACTTCTCTATCCCAAGCAAGAGAGTGGGAAAACTTCCCTAT	1680
Db	1621	ACCCACATATAGATGCCCACTTCTGTCTCCAAACCAAGACAGGAGATCAATTTCCCTTAC	1680
Qy	1681	CTGTATAGCGTATCAAGACCAACCGTGTGGCTTATGAGCTCAAGCGCCCTCCCGCTCGTGGAC	1740
Db	1681	CTGTATAGCGATACAAAGCCACGGTGTGGCCAGGGCTCAGGCTCAACCTCATGCTGGGAT	1740
Qy	1741	CAGATGTGAAGTCTGATCCGTCTCAAGCCACCTCCATYGGGCCAACACTCTGTCTA	1800
Db	1741	CAATGTGTGAAGTCTCATACGGCTTAAACTTACGCTGACACGGGCGCAACACCCCTGTG	1800
Qy	1801	TATATGACTGGGCGGTGTCACAAATGAAGTACCCCTGACGCAACCAAGTACCAAGTATATC	1866
Db	1801	TATATGCTAGGAGCGCTTCAAAATGAAGTACCCCTTCAACATCTCCATATCCAAATTTGTC	1866
Qy	1861	ATGACATATATGTCCGCTGACCTTGAAGGTCTCTACAGATACCTGGGTCTCTGTGGCGGC	1920
Db	1861	ATGCGATATCATGTCCGCGCACTTGAAGGTCTGTCACTATGACACTGGGTGCTGTATGGCGGA	1920
Qy	1921	GTTCTGGCTGCTTTGGCGCGCTATTTGGCTATCCACAGCTGCGGTGTCTATATGTAGTATGG	1980
Db	1921	GTTCTTGAAGTCTTGGCGCGCATATTTGCTTGAACACCGATGTGTGTATATGTAGTATGG	1980
Qy	1981	ATTGTCTGTCTCCGAAAGCCGGGCATATACCCGACAGGAAAGTCTCTTACCGGGAGTTT	2040
Db	1981	ATCATTTTGTCTCCGGAAGCGCGGCTGTGTTCCTCGACAGGAAAGTCTCTTACCGGAGTTT	2040
Qy	2041	GATGAATGGAAGGTGC	2058
Db	2041	GATGAATGGAAGGTGC	2058

RESULT 15  
US-10-559-431-1  
; Sequence 1, Application US/10559431  
; GENERAL INFORMATION:  
; APPLICANT: BIOMERIEUX



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APPLICANT: INSTITUT NATIONAL DE LA SANTE ET DE LA RECHERCHE MEDICALE
TITLE OF INVENTION: Composition comprising the polypeptide NS3/NS4 and the polypeptide
TITLE OF INVENTION: of HCV, expression expression vectors including the corresponding nucleic acid
TITLE OF INVENTION: their therapeutic use
FILE REFERENCE: ADEMOVIR
CURRENT APPLICATION NUMBER: US/10/559,431
CURRENT FILING DATE: 2005-12-05
NUMBER OF SEQ ID NOS: 27
SOFTWARE: PatentIn version 3.1
SEQ ID NO 1
LENGTH: 2844
TYPE: DNA
ORGANISM: Artificial sequence
FEATURE:
OTHER INFORMATION: sequence coding for NS3NS4
NAME/KEY: CDS
LOCATION: (1)..(2844)
OTHER INFORMATION:
US-10-559-431-1
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Query Match      67.2%; Score 1384.4; DB 7; Length 2844;
Best Local Similarity 79.5%; Pred. No. 0;
Matches 1637; Conservative 0; Mismatches 421; Indels 0; Gaps 0;
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Job time : 441 secs

Bank (12/1)